

The Collin College Catalog

Academic Year: 2023-2024

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ABOUT COLLIN COLLEGE

COLLEGE MISSION STATEMENT

The College District is a student- and community-centered institution committed to developing valuable skills, strengthening character and challenging the intellect.

VISION STATEMENT

Delivering a brighter future for our students and communities.

CORE VALUES

We have a passion for:

- Learning
- Service and Involvement
- Creativity and Innovation
- Academic Excellence
- Dignity and Respect
- Integrity

PHILOSOPHY AND PURPOSE STATEMENT

Through its campuses, centers and programs, the College District fulfills community and industry needs and its primary statutory purposes under Section 103.003(e) of the Texas Education Code by providing:

- Academic courses in the core curriculum or a field of study curriculum to transfer to higher education institutions;
- Programs leading to baccalaureate degrees, associate degrees, or certificates, including technical programs, designed to develop marketable skills and promote economic development;
- Continuing adult education programs for academic, professional, occupational and cultural enhancement;
- Developmental education and literacy programs designed to improve the basic skills of students;
- A program of student support services, including counseling and learning resources designed to assist individuals in achieving their educational and career goals;
- Workforce, economic and community development initiatives designed to meet local and statewide needs;
- Other purposes as may be directed by the Board and/or the laws of the State of Texas.

EQUAL OPPORTUNITY STATEMENT

Collin College is an equal opportunity institution and provides educational and employment opportunities without discrimination on any basis protected by applicable law.

Students with concerns regarding discrimination, harassment, retaliation, and/or sexual assault in violation of applicable laws should contact the District Dean of Students Office at 972.881.5604 or dos@collin.edu.

Collin College provides reasonable accommodations to afford equal educational opportunities to all people, in accordance with the [*Americans with Disabilities Act of 1990 \(ADA\)*](#), [*Americans with Disabilities Act and Amendments Act of 2008 \(ADAAA\)*](#), and [*Section 504 of the Rehabilitation Act of 1973*](#). Students requesting accommodations under these provisions should contact Collin College's Accommodations at Collin College for Equal Support Services (ACCESS) Office at 972.881.5898 (voice) or access@collin.edu.

Upon request, the *Collin College Catalog* is available in an alternate format for students with print-oriented disabilities. For more information, contact the ACCESS Office at 972.881.5898 (voice) or access@collin.edu. For persons who are Deaf or hard of hearing or have speech impairments, contact Texas Relay Services by dialing 711, 1.800.735.2989 (TTY) or 1.877.826.1789 (VCO).

INSTITUTIONAL ACCREDITATION STATUS

Collin County Community College District is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate and baccalaureate degrees. Collin County Community College District also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Collin County Community College District may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

PROGRAMMATIC ACCREDITING AGENCIES

Accreditation Commission for Education in Nursing (ACEN); Accreditation Commission for Programs in Hospitality Administration (ACPHA); American Council for Construction Education (ACCE); American Culinary Federation Education Foundation (ACFEF); American Dental Association's Commission on Dental Accreditation (CODA); American Veterinary Medical Association's Committee on Veterinary Technician Education and Activities (CVTEA); Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM); Commission on Accreditation for Respiratory Care (CoARC); Commission

on Accreditation of Allied Health Education Programs (CAAHEP) through the Committee on Accreditation of Emergency Medical Services Professions (CoAEMSP); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Medical Assisting Education Review Board (MAERB); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Committee on

Accreditation for Polysomnographic Technologist Education (CoAPSG); Commission on Accreditation of Allied Health Education programs (CAAHEP) through the Joint Review Committee on Education in Diagnostic Medical Sonography (JRCEDMS); National Association for the Education of Young Children (NAEYC); National Institute for Automotive Service Excellence (ASE)-Master Collision; National Institute for Automotive Service Excellence (ASE)-Master Automobile Service Technology.

CAMPUSES AND LOCATIONS

To see campus maps, visit www.collin.edu/campuses

Celina Campus

2505 Kinship Parkway
Celina, TX 75009
469.905.3590

Collin Higher Education Center (CHEC)

3452 Spur 399
McKinney, Texas 75069
972.599.3100

Courtyard Center (CYC)

4800 Preston Park Blvd.
Plano, Texas 75093
972.985.3790

Farmersville Campus

501 S. Collin Parkway
Farmersville, TX 75442
972.549.6490

Frisco Campus

9700 Wade Blvd.
Frisco, Texas 75035
972.377.1790

iCollin Virtual Campus

Administrative Offices
3452 Spur 399, Room 146
McKinney, Texas 75069
972.549.6416

McKinney Campus

2200 W. University Drive
McKinney, Texas 75071
972.548.6790

Plano Campus

2800 E. Spring Creek Parkway
Plano, Texas 75074
972.881.5790

Public Safety Training Center (PSTC)

3600 Redbud Blvd.
McKinney, Texas 75071
Fire Science: 972.548.6837
Law Enforcement Academy: 972.549.6325

Rockwall Center

Dr. Gene Burton College and Career Academy
2301 South John King Blvd.
Rockwall, TX 75032
469.698.7499

Technical Campus

2550 Bending Branch Way
Allen, TX 75013
972.553.1290

Wylie Campus

391 Country Club Road
Wylie, TX 75098
972.378.8790

WEBSITE INFORMATION

Collin College Home

www.collin.edu

Board of Trustees

www.collin.edu/leadership/board_of_trustees.html

Administration and Leadership Team

www.collin.edu/leadership

Faculty

www.collin.edu/hb2504

(course syllabi, professors' curricula vitae)

ACCESS – Disability Support Services

www.collin.edu/studentresources/disabilityservices/

Athletics

athletics.collin.edu

Continuing Education and Workforce Development

www.collin.edu/ce

Fitness Centers/Intramurals

www.collin.edu/intramurals

Honors Institute

www.collin.edu/academics/honors

Law Enforcement Academy

www.collin.edu/department/lawenforcement/

Service Learning

www.collin.edu/academics/servicelearning

Student Organizations/Cougar Connect

collin.campuslabs.com/engage/

The Art Gallery

www.collin.edu/department/artsgallery/

**The Center for Advanced Studies In
Mathematics and Natural Sciences**

www.collin.edu/academics/casmns/

Weekend College

www.collin.edu/academics/weekendcollege/

COLLEGE DISTRICT TELEPHONE NUMBERS

District Wide Offices

Collin College Police Department	972.578.5555
eCollin Learning Center.....	972.881.5870
Student Technical Support 24/7	972.377.1777

Celina Campus

Student Services

ACCESS.....	972.377.1781
Admissions	469.905.3518
Bookstore.....	469.905.6080
Career Center.....	469.905.3548
Cashier's Office.....	469.905.3516
Counseling Services.....	972.881.5126
Dean of Students Office.....	972.548.6771
Financial Aid.....	469.905.3527
Information Center	469.905.7674
Library	469.905.3568
Math/Writing Lab.....	469.905.3528
Student and Enrollment Services.....	469.905.3518
Student Engagement.....	469.905.3518
Testing Center.....	469.905.3574

Administrative Departments

Associate Dean of Academic Affairs.....	469.905.3515
Associate Dean of Student and Enrollment Services.....	469.905.3518
Campus Executive Dean Office.....	469.905.3572

Collin Higher Education Center (CHEC)

Student Services

Academic Partnerships/Associate Provost of Instruction.....	972.599.3121
Cougar News (Online Newspaper).....	972.758.3845
Information Center	972.599.3100

Administrative Departments

Title IX Coordinator for Complaints Against Employees.....	972.599.3159
Business Office	972.758.3820
Cashier's Office.....	972.758.3810
Dean of Students and Title IX Coordinator for Complaints Against Students.....	972.881.5604
District President's Office.....	972.758.3800
Executive Vice President.....	972.758.3883
Foundation (Scholarships)	972.599.3145
Vice President of Academic Affairs.....	972.549.6338
Vice President of Administrative Services/CFO.....	972.758.3831
Vice President of Advancement.....	972.758.3894
Vice President of Student and Enrollment Services.....	972.599.3151

CHEC Four-year University Representatives

Texas A&M University-Commerce	972.599.3122
Texas Tech University	972.599.3172

Texas Woman's University.....	972.599.3124
The University of Texas at Dallas.....	972.599.3127
University of North Texas.....	972.668.7350

Courtyard Center (CYC)

Student Services

Admissions.....	972.985.3711
Career Center.....	972.599.3174
Registration	972.985.3711

Administrative Departments

Cashier's Office	972.985.3724
Continuing Education	972.985.3750

Farmersville Campus

Student Services

ACCESS	972.881.5898
Admissions.....	972.549.6485
Bookstore	972.549.6440
Career Center.....	972.549.6425
Cashier's Office	972.549.6438
Counseling Services	972.548.6648
Dean of Students Office.....	972.548.5667
Financial Aid.....	972.549.6436
Information Center.....	972.549.6490
Library.....	972.549.6460
Math/Writing Lab.....	972.549.4365
Student and Enrollment Services	972.549.6474
Student Engagement	972.549.6485
Testing Center.....	972.549.6450

Administrative Departments

Associate Dean of Academic Affairs.....	972.549.6486
Associate Dean of Student and Enrollment Services	972.549.6441
Campus Executive Dean Office	972.549.6496

Frisco Campus (Preston Ridge Campus)

Student Services

ACCESS	972.881.5950
Admissions.....	972.377.1710
Bookstore	972.377.1680
Career Center.....	469.365.1904
Counseling Services	972.377.1781
Dean of Students Office	972.548.6771
Financial Aid/Veterans Affairs.....	972.377.1760
Fitness Center.....	972.377.1758
Information Center.....	972.377.1790
Library.....	972.377.1560
Math Lab	972.377.1639
Student Computer Lab.....	972.377.1577
Student and Enrollment Services	972.377.1645
Student Engagement	469.365.1970
Testing Center	972.377.1522

Writing Center..... 972.377.1576

Administrative Departments

Campus Provost Office..... 972.377.1550

Cashier's Office..... 972.377.1637

Dean of Student and Enrollment

Services..... 972.881.5902

Facilities Scheduling Coordinator 972.578.5536

Instruction Office (LH158)..... 972.377.1554

Instruction Office (F243) 972.377.1506

Instruction Office (J240) 972.377.1064

Instruction Office (L222) 972.377.1022

Instruction Office (U111)..... 972.377.1506

Texas Success Initiative (TSI) Info 972.548.6773

Divisions

Academic Affairs 972.377.1006

Workforce and Academic Affairs 469.365.1900

iCollin Virtual Campus

General Information 972.549.6416

McKinney Campus (Central Park Campus)

Student Services

ACCESS..... 972.548.6816

Admissions 972.548.6710

Bookstore..... 972.548.6680

Career Center..... 972.548.6747

Center for Academic Assistance..... 972.548.6505

Cooperative Work Experience:

Co-ops/Internships..... 972.377.1594

Counseling Services..... 972.548.6648

Dean of Students Office..... 972.881.5667

Director of Testing..... 972.548.6773

Financial Aid/Veterans Affairs 972.548.6760

Fitness Center..... 972.548.6891

Information Center 972.548.6790

Library 972.548.6860

Math Lab..... 972.548.6896

Student Computer Lab 972.548.6877

Student and Enrollment Services 972.548.6770

Student Engagement..... 972.548.6788

Testing Center..... 972.548.6849

Writing Center..... 972.548.6857

Administrative Departments

Campus Provost Office 972.548.6800

Instruction Office..... 972.548.6830

Cashier's Office..... 972.548.6616

Collaborative Instruction Center..... 972.548.6830

Dean of Student and Enrollment

Services..... 972.881.5707

Facilities Scheduling Coordinator 972.377.1743

Texas Success Initiative (TSI) Info 972.548.6773

Divisions

Academic Affairs 214.491.6270

Health Sciences and Emergency Services... 972.548.6679

Nursing..... 972.548.6772

Plano Campus (Spring Creek Campus)

Student Services

ACCESS 972.881.5898

ADA/Section 504 Coordinator..... 972.881.5898

Admissions..... 972.881.5710

THE ARTS gallery..... 972.881.5873

Bookstore 972.881.5680

Center for Scholarly and Civic

Engagement (CSCE) 972.881.5927

Child Development Lab School 972.881.5945

Cooperative Work Experience:

Co-ops/Internships See Career Coach

Career Center..... 972.881.5627

Counseling Services 972.881.5126

Dean of Students Office..... 214.491.6222

Financial Aid/Veterans Affairs..... 972.881.5710

Fitness Center 972.881.5848

Food Services..... 972.881.5949

Honors Institute..... 972.516.5003

Information Center..... 972.881.5790

International Student Office 972.516.5012

Library..... 972.881.5985

Math Lab 972.881.5921

Service Learning..... 972.881.5900

Student Computer Lab..... 972.881.5966

Student and Enrollment Services 972.881.5710

Student Engagement 972.881.5788

Testing Center 972.881.5922

Tutoring..... 972.881.5843

Writing Center..... 972.881.5843

Administrative Departments

Campus Provost Office 972.881.5770

Cashier's Office 972.881.5634

Dean of Student and

Enrollment Services..... 972.377.1595

Facilities Scheduling Coordinator..... 972.881.5606

Instruction Office (B103) 972.516.5090

Instruction Office (K237)..... 972.881.5759

Instruction Office (L215) 972.881.5756

Texas Success Initiative (TSI) Info 972.548.6773

Public Safety Training Center (PSTC)

Fire Science 972.548.6836

Law Enforcement Academy..... 972.548.6863

Rockwall Center

General Information..... 469.698.7499

Technical Campus

Student Services

ACCESS Advisor..... 972.553.1161

ACCESS Dual Credit..... 972.553.5128

Career Center..... 972.553.1283

Dean of Students Office..... 972.881.5667

Financial Aid..... 972.881.5710

Student Engagement 972.553.1144

Student Enrollment Services..... 972.377.1710

Veterans Resource Center..... 972.553.1186

Other/Administrative Departments

Associate Dean of Student and
Enrollment Services 972.553.1164
Bookstore..... 972.553.1280
Bursar/Cashier's office..... 972.553.1220
Campus Provost Office..... 972.553.1111
Center for Academic Assistance..... 972.553.1236
Dean of Academic Affairs..... 972.553.1100
Dean of Workforce 972.553.1167
Dual Credit/P-12 Partnerships..... 972.553.1850
Faculty/Instruction Office – Academic..... 972.553.1122
Faculty/Instruction Office –
Health Sciences/Nursing..... 972.553.1150
Information Center 972.553.1290
Library 972.553.1123
Testing Center..... 972.553.1234
Texas Success Initiative (TSI) Info 972.553.1234

Wylie Campus

Student Services

ACCESS..... 972.378.8364
Bookstore..... 972.378.8680
Campus Testing Center 972.378.8849

Career Center..... 972.378.8323
Center for Academic Assistance..... 972.378.8935
Cougarfit Center..... 972.378.8891
Dean of Students Office..... 972.378.8292
Financial Aid..... 972.548.6760
Honors Institute..... 972.378.8897
Information Desk 972.378.8790
Library..... 972.378.8660
Food Services..... 972.378.8789
Student Engagement 972.378.8482
Veterans Resource Center 972.378.8291

Administrative Departments

Academic Affairs..... 972.378.8797
Admissions..... 972.548.6710
Campus Provost Office 972.378.8889
Cashier's Office 972.378.8816
Dean of Student and Enrollment
Services 972.378.8695

Divisions

Agriculture Program 972.378.8301
Veterinary Technology..... 972.378.8301

2023-2024 ACADEMIC CALENDAR

FALL 2023

Aug. 11	All College Day (All Campuses Closed)
Aug. 21	Fall Classes Begin
Sept. 4	Labor Day Holiday (All Campuses Closed)
Sept. 5	Fall 16 Week Census Date
Sept. 22	Plano Balloon Festival-Plano Campus Closes @ 3 pm
Sept. 23-24	Plano Balloon Festival-Plano Campus Closed
Nov. 3	Fall 16 Week Last Day to Withdraw
Nov. 22-26	Thanksgiving Holiday (All Campuses Closed)
Dec. 4-10	Fall Final Exam Week
Dec. 8	Collin College Fall Commencement @ 7 pm
Dec. 11-21	Wintermester Classes Meet
Dec. 12	Wintermester Census Date
Dec. 15	Wintermester Last Day to Withdraw
Dec. 22-Jan. 1	Winter Break (All Campuses Closed)

SPRING 2024

Jan. 2	Wintermester Classes Resume
Jan. 3	Wintermester Final Exams
Jan. 15	MLK Holiday (All Campuses Closed)
Jan. 16	Spring Classes Begin
Jan. 29	Spring 16 Week Census Date
Mar. 11-17	Spring Break (All Campuses Closed)
Mar. 28	Spring 16 Week Last Day to Withdraw
Mar. 29-31	Spring Holiday (All Campuses Closed)
May 6-12	Spring Final Exam Week
May 10	Collin College Spring Commencement @ 7 pm

SUMMER 2024

May 13	Maymester Classes Begin
May 14	Maymester Census Date
May 17	Maymester Last Day to Withdraw
May 27	Memorial Day Holiday (All Campuses Closed)
May 28	Maymester Final Exams
June 3	5 Week June (Summer I) and 10 Week (Summer III) Classes Begin
June 6	5 Week June (Summer I) Census Date
June 11	10 Week (Summer III) Census Date
June 14	July 4th Make-up Day for 5 Week June (Summer I) and 10 Week (Summer III) TR Classes
June 18	5 Week June (Summer I) Last Day to Withdraw
July 3	5 Week June (Summer I) Final Exams
July 4	Independence Day Holiday (All Campuses Closed)
July 5	10 Week (Summer III) Last Day to Withdraw
July 8	5 Week July (Summer II) Classes Begin
July 11	5 Week July (Summer II) Census Date
July 19	Required Class Day for 5 Week July (Summer II) and 10 Week (Summer III) MW Classes
July 23	5 Week July (Summer II) Last Day to Withdraw
July 26	Required Class Day for 5 Week July (Summer II) and 10 Week (Summer III) TR Classes
Aug. 5-6	10 Week (Summer III) Final Exams
Aug. 6	5 Week July (Summer II) Final Exams

ADMISSIONS

COLLEGE ADMISSIONS POLICIES

Collin College operates under an “open door” policy. Students who are 18 years of age or older are eligible for admission. Other students may be admitted under the special admission requirements. The college reserves the right to guide the placement of students through assessment, which may include interviews and a review of past academic achievement.

Registration options are self-service, and delays may be avoided by completing all admission requirements (registration holds) in advance of registration. In all admissions policies and practices, Collin College does not discriminate on the basis of race, color, religion, sex, national origin, age, disability or military status in accordance with federal and state laws.

Official transcripts are required from all institutionally accredited colleges/universities attended. Failure to provide a transcript will result in future registration at Collin College being blocked and ineligibility to receive Collin College transcripts. If no college/university has been attended a high school transcript or GED may be required. Documents and transcripts submitted for admission become the property of Collin College and will not be returned to the applicant.

SELECTIVE ADMISSION PROGRAMS

The Bachelor of Applied Science (BAS), Bachelor of Applied Technology (BAT), and the Bachelor of Science in Nursing (BSN) programs as well as the following associate degree and certificate programs have selective program admissions criteria that require departmental acceptance to enroll: activity care professional, child development, central sterile processing, culinary arts, dental hygiene, diagnostic medical sonography, emergency medical services professions, fire academy/fire science, health information management, medical assisting advanced practice, nursing, pastry arts, pharmacy technician, physical therapist assistant, polysomnography technology, rehabilitation aide, respiratory care, surgical assisting, surgical technology, veterinary technology, and vocational nursing. Please refer to the catalog and/or contact the academic department office for information on admission requirements for these programs.

STUDENTS NEW TO COLLIN

Admission of First-Time Freshmen

Students 18 years and older who have never attended a college/university must:

1. Complete an application online at <https://www.collin.edu/admissions/>.

2. Submit a final, official high school transcript or GED.
3. Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption/waiver.
4. Provide proof of meningitis vaccination, if needed.
5. Participate in New Student Orientation.
6. Complete mandatory campus safety training.

Admission of Applicants Without a Diploma or GED*

Students under age 18 without a high school diploma or equivalent and no longer involved in a high school program applying for admission must:

1. Complete an application online at <https://www.collin.edu/admissions/>.
2. Provide documentation that the student is no longer enrolled in a high school program.
3. Submit an official transcript from the last U.S. high school attended.
4. Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption/waiver.
5. Provide written parental/guardian permission for students under 18 years of age.
6. Provide proof of meningitis vaccination, if needed.
7. Complete mandatory campus safety training.

Applicants over 18 years of age admitted without a GED or high school diploma will be strongly encouraged to complete the GED during the first semester of his/her enrollment at Collin College.

Information about GED testing is available through the Texas Education Agency’s website at <http://www.tea.state.tx.us>. Additionally, the Collin County Adult Literacy Council, through its website and help line, offers a referral service for North Texas (<http://www.ccalc.org>).

***Note:** Students admitted under this policy are not eligible for Title IV-financial aid.

Admission of Home-School Students

To be admitted, all home-schooled students under the age of 18 must:

1. Complete an application online at <https://www.collin.edu/admissions/>.
2. Provide Official Home School Transcript.
3. Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption/waiver.

4. Provide proof of meningitis vaccination, if needed.
5. Submit signed High School/Dual Enrollment Permission Form with appropriate signatures.
6. Complete mandatory campus safety training.

Admission of High School Students (Concurrent Enrollment/Dual Credit)

The High School Concurrent Enrollment/Dual Credit program is designed for high-school-aged students who are ready to begin earning college credits. All students are encouraged to participate.

High school students interested in concurrent enrollment or dual credit admission to Collin College must:

1. Complete an application online at <https://www.collin.edu/admissions/>.
2. Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption/waiver.
3. Provide proof of meningitis vaccination if needed.
4. Submit signed High School/Dual Enrollment Permission Form with appropriate signatures.
5. Complete mandatory campus safety training.

Students not applying through their high school dual credit program may contact a Special Admission Coordinator for admissions and course availability information (not all college courses are available for dual credit or concurrent enrollment).

Students needing academic accommodations must apply and be approved with [ACCESS](#).

Admission of Transfer Students

Transfer students are eligible for admission to Collin College and must:

1. Complete an application online at <https://www.collin.edu/admissions/>.
2. Provide an official transcript from all accredited institutions of higher education.
3. Provide proof of exemption/waiver of TSI, if needed.
4. Provide proof of meningitis vaccination if needed.
5. Complete mandatory campus safety training.

Admission of International Students

Applicants on temporary visas may be eligible for admission. To verify residency status, applicants are required to present their visa with their application to the admissions area in the Student and Enrollment Services Office at the Plano Campus (Spring Creek). Contact admissions@collin.edu

International Student Admissions (F-1 Visa)

All applicants holding F-1 visas should contact the International Student Office (ISO) at 972.516.5012 or email iso@collin.edu. The following deadlines must be met for degree-seeking applicants residing outside the United States seeking the F-1 student visa:

1. Fall semester – June 1
2. Spring semester – October 1
3. Summer terms – March 1

All applicants for international student admissions must complete an online International application for admission and submit the following items to ISO at the Plano Campus (Spring Creek) in Room G-103 or through email to iso@collin.edu.

1. Test Scores:
 - a. F-1 degree-seeking applicants must submit one (1) of the following:
 - i. TOEFL Internet-Based Test (IBT) score of 71 or higher, or
 - ii. International English Language Testing System (IELTS) score of 6.5 or higher.
 - b. F-1 English as a Second Language (ESL) program applicants must submit one (1) of the following:
 - i. TOEFL Internet-Based Test (IBT) score of 32 (minimum score of 8 in each skill), or
 - ii. IELTS score of 4.5 (minimum score of 4.0 in each skill).
 - c. An applicant can be exempt from the English proficiency requirement using one (1) of the following:
 - i. The applicant has completed at least one (1) academic year and graduated from a U.S. high school, then an official high school diploma or transcript can be submitted in place of official TOEFL or IELTS scores.
 - ii. The applicant is from an approved TOEFL exempt country. (Please visit <https://www.collin.edu/advising/international/> for a list of exempt countries.)
2. A completed Letter of Guarantee from the sponsor dated within six (6) months of the date of the application deadline and the supporting financial evidence statement.
3. Submit transcripts (i.e., mark sheets, school records) from the foreign high school or college attended. Unofficial transcripts are acceptable.
4. A copy of the passport ID page, with at least six (6) months validity, showing official name, date of birth, and citizenship.
5. Proof of receiving the bacterial meningitis vaccine, if needed.

Upon arrival at Collin College, all original immigration documents, including a valid visa (I-94 arrival/departure

record), a valid passport, the I-20, and the local address form, will be copied and kept on file with ISO.

All applicants are required to take the Pre-Assessment Activity (PAA) and the Texas Success Initiative Assessment (TSIA) prior to enrolling in credit classes.

Foreign transcripts will not be evaluated. I-20s will not be issued for students seeking entrance into the United States on a permanent basis.

Tuition and fees should be paid in full prior to the first class day unless the student has enrolled in Collin College's installment payment plan. There is no federal or state financial aid available for international students.

Transfer international students within the United States (F-1 Visa)

The following deadlines must be met for transfer international students holding F-1 visas:

1. Fall semester – July 15
2. Spring semester – November 15
3. Summer terms – April 15

In addition to the requirements listed in the [International Student Admissions \(F-1 Visa\)](#) subsection above, the following items must also be submitted:

1. A copy of current I-20, passport with at least six (6) months validity, visa, and I-94.
2. Transfer Verification Form from the international student advisor at the last college or university attended.
3. Institutional TOEFL score reports of 525 (or higher) from The University of Texas at Arlington (UTA), the University of Dallas, or the University of Phoenix will be accepted in lieu of an official TOEFL score report. Applicants who can document graduation from the Intensive English Language Institute at the University of North Texas (UNT) or have completed Freshman English with a "C" or better will be exempt from the TOEFL requirement.
4. Official transcripts from all colleges and universities attended in the United States with a minimum GPA of 2.0. To ensure enrollment, degree-seeking transfer applicants should submit admission requirements prior to the deadlines listed online at <https://www.collin.edu/advising/international/>.

For more information, contact ISO in person at the Plano Campus (Spring Creek) in Room G-103, by phone at 972.516.5012, or by email at iso@collin.edu. To download the required forms, go to <https://www.collin.edu/advising/international/>.

RETURNING STUDENTS

Former Collin College students who have not been enrolled at Collin College during the preceding 12 months will need to:

1. Complete an updated application online at: <https://www.collin.edu/admissions/>.
2. Provide an official transcript from all accredited institutions of higher education since last attending Collin College.
3. Provide proof of exemption/waiver of TSI.
4. Provide proof of meningitis vaccination, if needed.
5. Complete mandatory campus safety training, if needed.

COLLEGE WIDE IDENTIFICATION (CWID) AND EMAIL

Students admitted to Collin College are issued a nine-digit College Wide ID (CWID) number to be used instead of their Social Security number to access their records when they are admitted to the college.

Official communication between students and faculty/staff is through the college wide email system, which is accessed through the campus portal CougarWeb. For login information, contact Student and Enrollment Services or visit <http://www.collin.edu>.

ACADEMIC FRESH START

State law (Education Code, Sec. 51.931) allows students who are residents of Texas and who have academic credits earned 10 or more years prior to the starting date of the semester in which they seek admission to Collin College to have those credits or grades not considered in the admission decision. This allows students to begin a new course of study with a clear academic record.

Note: This is an all or nothing option. Students are not able to pick and choose which courses to include or exclude. If the "Academic Fresh Start" option is selected, credits for any courses taken 10 or more years ago will not be counted. This means that

- Courses taken previously cannot be used to fulfill new prerequisite requirements.
- Courses taken previously cannot be counted towards the new degree.
- Courses taken previously will not be counted in the new GPA calculations.

Students must complete the admissions process, including providing information on all colleges or universities previously attended and providing official transcripts from all schools attended.

Students under the Fresh Start provision must still meet the criteria for the Texas Success Initiative

(<https://www.collin.edu/studentresources/testing/availabletesting/tsi.html>).

Additional notes:

- Academic Fresh Start must be claimed upon application to Collin College and will not be applicable to currently enrolled students.
- Once the "Right to an Academic Fresh Start" provision has been claimed, and the student has enrolled, the provision cannot be reversed.
- An applicant may use the Academic Fresh Start provision only once at Collin College.

APPLYING FOR ACADEMIC FRESH START

Students must submit an application for Fresh Start prior to enrollment at Collin College, preferably at the time of admission. The application is available through the Registrar's Office. Students will not be granted Fresh Start until they have completed their admissions file. The application for Fresh Start should be completed, signed, and returned to the Registrar's Office.

Approval of Fresh Start Application

The final authority on applying or interpreting the State law (Education Code, Sec. 51.931), Right to an Academic Fresh Start is the Registrar.

EFFECT ON FINANCIAL AID

Academic Fresh Start impacts only your academic record. For more information on the impact on financial aid, please contact the Financial Aid/Veterans Affairs office.

NEW STUDENT ORIENTATION

While all First-Time In College students (freshmen) are required to complete New Student Orientation prior to registration, all students are encouraged to attend. The purpose of orientation is to provide a comprehensive overview of available campus services, resources, and opportunities. Students who are unable to attend the on-campus orientation can complete online orientation.

For additional information including dates and reservations, please call 972.881.5788, email orientation@collin.edu or visit the website at <http://www.collin.edu/orientation>.

CAMPUS SAFETY TRAINING

All entering freshmen and transfer students must complete online training on active shooter preparedness, campus safety, hazing, sexual assault, sexual harassment, and suicide prevention. This training must be completed prior to registration and can be accessed through CougarWeb.

For more information regarding the Mandatory Campus Safety Training hold, call 972.881.5902 or log into CougarWeb at <https://cougarweb.collin.edu>. For more

information regarding the Campus Safety Training content and resources, call 972.881.5604 or email dos@collin.edu.

Hazing

Hazing is a criminal violation under Texas law and is prohibited at Collin College, on Collin College property, or while attending Collin College-sponsored activities on or off campus. A person commits an offense if the person engages in hazing; solicits, encourages, directs, aids, or attempts to aid another in engaging in hazing; recklessly permits hazing to occur; or has first-hand knowledge of the planning of a specific hazing incident involving a student at Collin College, or has first-hand knowledge that a specific hazing incident has occurred, and knowingly fails to report that knowledge in writing to the dean of students or other appropriate Collin College official. Collin College will develop and post in a prominent location on its website a report on hazing committed on or off campus by an organization registered with or recognized by Collin College. For more information on hazing and to view Collin College's current hazing report, go to <https://www.collin.edu/studentresources/deanofstudents/hazing.html>.

ESTABLISHING TEXAS RESIDENCE FOR TUITION PURPOSES

To be considered a Texas resident for tuition purposes, students must have clearly established a domicile in Texas for the 12 months preceding enrollment. Documentation of Texas residency is required.

1. An in-county student is an individual who is a resident of Texas and who resides in Collin County on or before the census date of the term.
2. An out-of-county student is a resident of Texas who resides outside of Collin County on the census date of the term.
3. An out-of-state student is an individual who has not resided in Texas for 12 months preceding registration. Most students on temporary visas will also be classified as nonresidents for tuition purposes. Contact Student and Enrollment Services for visas eligible for in-state residency.

The responsibility for registering under the proper residency classification is that of the student, and any question concerning the student's right to classification as a resident of Collin County must be clarified prior to enrollment at Collin College. Students not documenting county or state residency prior to census date of the term will be charged the higher rate. Tuition refunds due to residency changes will only be made for college errors. Documentation submitted after census, see the academic calendar for date, which result in a residency change will be effective dated to the next semester. Changes of address, name, etc. must be reported promptly to Student and Enrollment Services. This enables students to receive registration and other information from various college

departments and programs. Changes of address affecting residency should be reported promptly to the Admissions Office.

Students (age 24 and under) who are a dependent of a Texas resident should contact Student and Enrollment Services for more information.

DOCUMENTS TO SUPPORT RESIDENCY

Documentation of Texas residency will be required in order to pay in-state tuition. Generally, the following documents may be used in meeting residency requirements:

- Texas public, private, or high school transcript (if enrolled the last 12 months) showing three years of attendance and a graduation date.
- State identification card
- Texas driver's license
- Voter's registration card

AD VALOREM WAIVERS

Students who have not lived in Texas for the 12 months preceding registration, but who own residential property in Collin County, may be eligible for an ad valorem waiver. A copy of the deed or most recent property tax statement is required for verification. If this waiver is based on a student's (under age 24) parents' property ownership, go to Student and Enrollment Services for the proper form to complete. This form must be completed each semester until Texas residency has been established (12 months); ad valorem waivers expire and additional residency must be provided. Property owners on most types of temporary visas are not eligible for the ad valorem waiver. Students and/or their parents must generally be U.S. citizens or permanent residents to be eligible for an ad valorem waiver.

TESTING CENTERS AND ASSESSMENT SERVICES

Testing Centers are located at the Celina, Farmersville, Frisco, McKinney, Plano, Technical, and Wylie campuses for the Texas Success Initiative (TSI) Assessment for course placement, higher level math assessment, credit by exam testing, limited instructional testing, ESL assessments, and proctoring of correspondence exams. Collin College is a Pearson VUE testing partner and an official testing site for ACT (American College Testing Program), and CLEP (College-Level Examination Program).

Collin College codes for these tests are:

1. ACT, McKinney Campus (Central Park) 40460
2. ACT, Plano Campus (Spring Creek) 42090
3. CLEP 2290

The Testing Centers are monitored by surveillance equipment.

TEXAS SUCCESS INITIATIVE (TSI)

The Texas Success Initiative (TSI) Assessment is a program designed to determine if the student is ready for college-level course work in the general areas of English Language Arts Reading (ELAR) and Mathematics. The TSI mandates that all new students (unless otherwise exempt) entering Texas public colleges and universities be assessed in the basic skills of reading, writing, and mathematics. Based on assessment results, a student may either be enrolled in a college-level course that matches his or her skill level or placed in the appropriate developmental course or intervention to improve skills and prepare the student for success in college-level courses.

Students wanting to enroll only in English as a Second Language (ESL) coursework can do so without taking the TSI assessment.

Mandatory Pre-assessment Activity (PAA)

Before taking the initial TSI Assessment, a student must participate in a Pre-assessment Activity (PAA) located online. A Certificate of Completion should be printed at the end of the PAA and is required to take the TSI Assessment.

Exemptions

Students may seek exemption from TSI based on:

- an ACT Math score of 22 or higher and a combined English and Reading score of 40 or higher on exams taken on or after February 15, 2023
- an ACT Composite score of 23 or higher (with individual Mathematics and English scores of no less than 19) for exams taken on or before February 14, 2023,
- SAT scores with an Evidence-based Reading and Writing score of 480 or higher and a Math score of 530 or higher,
- Meeting the college readiness benchmark on either of the state's approved High School Equivalency (HSE) tests taken on or after May 12, 2021:
 - GED scores of 165 or higher on the Mathematical Reasoning subject test and 165 or higher on the Reasoning Through Language Arts (RLA) subject test,
 - HiSET* scores of 15 or higher on the Mathematics subtest and a score of 15 or higher on the Reading subtest and a score of 15 or higher on the Writing subtest (that includes a minimum score of 4 on the essay),
- Documentation for a student who, on or after August 1, 1990, was honorably discharged, retired,

or released from active duty as a member of the armed forces of the United States or the Texas National Guard or service as a member of a reserve component of the armed forces of the United States. The student must provide a copy of his or her DD214 (Member 2 or Member 4 version) to document this exemption.

- Completion of an associate or baccalaureate degree from an institution.
- Transfer student from a U.S. private or out-of-state institutionally accredited college/university with three or more credit level hours (D or better).

*The HiSET test will no longer be administered after 8/31/21; however, HiSET test scores are valid up to five (5) years from date of testing.

Note: ACT or SAT scores can be no more than five (5) years old. HSE test scores are accepted for up to five (5) years from the date of testing and can be taken in or out-of-state, only test date and related test score are applicable to the TSI exemption.

Partial Exemptions

Students with an ACT Math score of 22 or higher are exempt from TSI Math even if the student does not meet the English/Reading requirement. Students with a combined English and Reading score of 40 or higher are exempt from the TSI English Language Arts Reading (ELAR) even if the student does not meet the Math requirement. These scores are for tests taken on or after February 15, 2023.

Students with an ACT Composite score of 23 (or higher) can be exempt from TSI Math with an ACT Math score of 19 (or higher) even if the ACT English score is less than 19. Students with an ACT Composite score of 23 or higher can be exempt from the TSI English Language Arts Reading (ELAR) with an ACT English score of 19 (or higher) even if the ACT Math score is less than 19. These scores are for tests taken on or before February 14, 2023.

Students with an SAT Evidence-based Reading and Writing score of 480 or higher can be exempt from TSI English Language Arts Reading (ELAR). Students with an SAT Math score of 530 or higher can be exempt from TSI Math.

Students with a GED score of 165 or higher on the Mathematical Reasoning subject test can be exempt from TSI Math.

Students with a GED score of 165 or higher on the Reasoning Through Language Arts (RLA) subject test can be exempt from TSI English Language Arts Reading (ELAR).

Students with a HiSET* score of 15 or higher on the Mathematics subtest can be exempt from TSI Math.

Students with a HiSET* score of 15 or higher on the Reading subtest and a score of 15 or higher on the Writing subtest, including a minimum score of 4 on the essay, can be exempt from TSI English Language Arts Reading (ELAR).

New students will be required to furnish Collin College with necessary proof regarding TSI status.

*The HiSET test will no longer be administered after 8/31/21; however, HiSET test scores are valid up to five (5) years from date of testing.

Waivers

Students can be waived from TSI requirements if they:

- are pursuing a Level I workforce certificate of no more than 42 hours. To obtain this waiver, the student must contact the director of testing and have a degree plan on file; or
- are serving on active duty as a member of the armed forces of the United States, the Texas National Guard, or as a member of a reserve component of the armed forces of the United States, and have been serving for at least three (3) years preceding enrollment (documentation required); or
- have successfully completed College Preparatory courses. This waiver is only available for two years from the date of high school graduation. Successful completion of College Prep English/Language Arts allows for a waiver in TSI English Language Arts Reading (ELAR). Successful completion of College Prep Math allows for a waiver for TSI Math.

Temporary Waivers for Dual Credit Students

- PSAT-NMSQT
Dual Credit students with a PSAT-NMSQT administered after October 15, 2015, with an Evidence-Based Reading and Writing score of 460 or higher will be waived from TSI English Language Arts Reading (ELAR).
PSAT-NMSQT administered after October 15, 2015, with a Math score of 510 or higher will be waived from TSI Math.

Note: PSAT scores can be no more than five (5) years old.

- **ACT-Aspire**
Dual Credit students with a minimum ACT-Aspire English score of 435 or higher will be waived from the TSI English Language Arts Reading (ELAR). A minimum ACT-Aspire Math score of 431 or higher will be waived from the TSI Math.
- **STAAR**
Dual Credit students with a STAAR English II of 4000 or higher will be waived from the TSI English Language Arts Reading (ELAR). STAAR Algebra 1 of 4000 or higher and at least a grade of 70 in their Algebra 2 course will be waived from TSI Math.

Dual Credit students only need to meet waiver requirements in the domain(s) for which they are enrolling. For example, ENGL 1301, GOVT 2305, HIST 1301 requires a qualifying waiver only in the English Language Arts Reading (ELAR) domain. MATH 1314 requires a qualifying waiver only in the Math domain.

MANDATORY ADVISING HOLDS

Students who are below college level in either the English Language Arts and Reading (ELAR) or Mathematics Texas Success Initiative Assessment (TSIA) areas are required to meet with an advisor or complete an online survey during their first semester at Collin College. Students will be required to have regular contact with an advisor until they are TSIA complete in both areas. Students who do not place at the college level in both the English Language Arts and Reading (ELAR) and Mathematics TSIA areas are required to meet with an advisor and register for the mandatory EDUC 1300 Learning Framework course during their first semester at Collin College.

For more information, contact the Student and Enrollment Services Office at any campus.

Developmental Education (DE) COURSES

Developmental Pre-college level foundational coursework in Mathematics, Integrated Reading/Writing, and English as a Second Language (ESL) is designed to enable students to achieve college success.

WHAT IS DEVELOPMENTAL EDUCATION?

DE courses are designed to provide students with basic skills to achieve success in college-level courses and to pass the TSI (Texas Success Initiative) tests.

The instructional formats of DE courses vary and include online, lecture, hybrid, express and weekend. Most developmental education courses will be taught in a corequisite format in which the developmental content is taught along with the college course content.

Do DE credits apply to a degree?

Although students receive grades for DE courses, those DE courses do not apply toward a degree or certificate. The DE credit does not transfer to other institutions, and DE grades are not calculated as part of the student's grade point average (GPA) shown on transcripts. However, DE grades are sometimes considered when applying for scholarships, financial aid, veteran benefits, etc.

Who is required to take DE?

If a student's scores on the basic skills assessment indicate that a student would be better prepared by taking a DE course prior to or along with enrolling in a college-level course in a related field, the student must enroll in the DE course before or along with enrolling in college-level courses in that field of study. For students who do not place at college-level courses in both Texas Success Initiative (TSI) areas of reading/writing and mathematics, a meeting with an Academic Advisor is required as well as mandatory course registration in EDUC 1300 Learning Framework.

Co-requisite Courses

The developmental education program has evolved from independent courses to co-requisite courses explicitly connected to college courses due to HB 2223 in the 2017 Texas legislative. A co-requisite course is a developmental education course that must be taken with a math, English, history, or government course. Most developmental education students place into co-requisite courses.

DE LIMITS

DE courses may be taken for a combined total of no more than 18 credit hours without incurring additional fees of \$50 per credit hour. This additional fee is applied because the state of Texas will not pay a state subsidy for any DE credit hours in excess of 18 credit hours. Dropping a developmental education course before census day will result in the credit hours for that course not counting toward the 18 credit hour limit.

Home school and high school students are not permitted to enroll in DE courses.

DEVELOPMENTAL EDUCATION DEPARTMENTS

Developmental Mathematics

Collin College offers pre-algebra and algebraic skills courses to enable students to acquire a solid foundation for successful performance in college level mathematics courses. These courses are taught either prior to or in conjunction with college credit courses. MATH 0405: Math Foundations prepares students to take corequisite courses in a pathway.

Developmental Math Pathways

All Developmental Math students are required to visit with an Academic Advisor to help determine the most appropriate path to meet their education/career goals as well as consideration for the requirements of potential transfer college or university programs. Students who are placed into Developmental Mathematics at Collin College have an option of two pathways to complete their Developmental Math sequence:

Algebra Intensive Path. This path supports students who enroll in MATH 1314 College Algebra or MATH 1324 Mathematics for Business and Social Sciences. Students who are seeking careers in Science, Technology, Engineering, Business and Mathematics (STEM) fields should follow this path.

MATH 0314 College Algebra Support
MATH 0324 Mathematics for Business and Social Sciences Support

Quantitative Literacy Path. This path supports students enrolled in MATH 1342 Elementary Statistical Methods or MATH 1332 Contemporary Mathematics (Quantitative Reasoning). Students seeking liberal arts degrees in fields without a mathematical basis should follow this path.

MATH 0332 Contemporary Mathematics Support
MATH 0342 Elementary Statistical Methods Support

Students must take an assessment (via the Testing Center) for placement purposes. Once placed in a course, many support services are provided to enable students to succeed. Among the services are the Math Lab, video tapes of lectures on specific topics, tutoring, study skills seminars, and scheduled review sessions.

Integrated Reading and Writing (INRW)

The ability to write clearly and accurately is critical to success in academic and professional pursuits. The Integrated Reading and Writing program provides instruction in all aspects of planning and producing academic prose in preparation for the TSI writing assessment and for ENGL 1301. The rubric for this coursework is INRW. Courses are:

INRW 0405 Integrated Reading /Writing I, and
INRW 0315 Integrated Reading /Writing II (taught as a corequisite course)

ENGLISH AS A SECOND LANGUAGE (ESL)

Collin College offers English for speakers of other languages to build their confidence and skills in listening/speaking, grammar, reading, writing, vocabulary development, and study skills. Classes are designed for various interests, personal needs, academic needs, and skill levels. Collin college offers ESL courses in two formats: i)

through the credit ESL program for students preparing to meet TOEFL/IELTS requirements to take college-level courses, and ii) through Continuing Education for students preparing to enter the workforce or to meet personal needs.

For Students Taking ESL courses in Preparation to Meet TOEFL/IELTS Requirements to Take College-Level Courses:

The ESL courses offered by Collin College for college credit are designed to prepare students with the language skills needed for English language proficiency and academic success. Instruction in credit ESL courses is provided at the intermediate, advanced and transitioning levels to provide students with the English language skills and cultural understanding necessary to succeed in college level courses and situations.

New students wanting to enroll in a credit ESL course must take the ESL New Student Assessment and meet with an advisor. ESL New Student Assessment scores are valid for one year. These scores are used for course placement only and do not affect the admission status of students. Students intending to take credit ESL courses can learn more about the assessment process from the ESL website at <http://www.collin.edu/departments/esl/> or by visiting the ESL Testing Coordinator in F-135 on the Plano Campus.

The ESL courses offered by the credit ESL program include courses in ESL Listening and Speaking (see ESLC courses), ESL Grammar (see ESLG courses), ESL Reading (see ESLR courses), ESL Writing (see ESLW courses) and some specific skills focused courses in Pronunciation and Accent Modification, Vocabulary and Idioms, and Test-taking & Study Techniques (see ESLX courses). For more information on each of these types of courses, see the course listing in the course description section of the catalog for each of the course types shown above.

For Students Taking ESL Courses in Preparation to Enter the Workforce or to Meet Personal Needs:

The ESL courses offered by Continuing Education include introductory, intermediate, and advanced level courses to improve English-language learning and communication skills in the workplace. Courses include listening, speaking, reading, and writing at six different levels to help students become fluent and proficient in English. Daytime, evening and weekend courses are offered every semester. Continuing Education's ESL courses are organized to allow progression from one level to another upon successful completion of each course.

Students intending to take ESL courses to prepare to enter the workforce or to meet personal needs should contact Collin College's Continuing Education Department by telephone at 972-985-3750 or by email at CEInfo@collin.edu, for information about free ESL placement testing and available courses.

The ESL courses offered by Continuing Education include: Accent Modification, Communication Improvement (Introductory and Levels 1-5), Grammar (Beginning through Advanced), Conversation (Beginning through Advanced), Pronunciation (Beginning through Advanced), and Reading & Vocabulary Comprehension (Beginning to Intermediate).

For more information about the Continuing Education ESL courses please go to: <https://www.collin.edu/ce/classes/esl.html>

REGISTRATION PROCEDURES

ONLINE REGISTRATION FOR CREDIT CLASSES

Registration for credit classes is completed online only. Online registration provides students with an opportunity to register early in courses for the upcoming semester. This process is designed for students who have completed their admissions, TSI, assessment requirements, and have met with an academic advisor.

STUDENT LOAD

Full-time: A student enrolled for 12 credit hours or more in a Fall semester, Wintermester/Spring semester, or Maymester/Summer semester.

Part-time: A student enrolled for 11 credit hours or less in a Fall semester, Wintermester/Spring semester, or Maymester/Summer semester.

LIMITS ON STUDENT ENROLLMENT

Students are limited to registering for no more than the following number of semester credit hours in the indicated terms or parts-of-term.

Fall Semester:

Fall 16 week term – 18 credit hours maximum

Wintermester/Spring Semester:

Wintermester part-of-term – 3 credit hours maximum
Spring 16 week term – 18 credit hours maximum

Maymester/Summer Semester:

Maymester part-of-term – 3 credit hours maximum
Summer 5-week part-of-term – 7 credit hours maximum
Summer 10-week part-of-term – 9 credit hours maximum
(Students are limited to a total of 16 credit hours in all parts-of-term during the Maymester/Summer Semester.)

Students may, with special permission from the registrar, enroll for more than 18 credit hours during a regular 16-week term and for more than 16 credit hours in the Maymester/Summer semester. Permission will not be granted unless the student has successfully completed 24 credit hours, has been enrolled in at least one semester full time, and has a 3.0 cumulative grade point average (GPA) and plans to carry no more than 21 hours during a regular 16-week semester or no more than nine (9) hours during a Summer 5-week part-of-term or more than twelve (12) hours during a Summer 10-week part-of-term. Students are limited to one (1) course, maximum three (3) credit hours, during the Maymester and Wintermester parts-of-term.

Notice for International Students:

Please note international students whose first semester is a Maymester/Summer semester are required to complete six

semester hours. International students who are enrolled in the ESL program are required to enroll in 15 credit hours during the Fall, Wintermester/Spring and Maymester/Summer semesters.

ADD/DROP

Credit students may add classes using the CougarWeb system through the first (1st) four (4) days of classes during regular 16-week semesters and during the first (1st) day of class of the Summer or mini-semester terms. For express and weekend courses, registration deadlines will vary. For regular 16-week classes, there is a hard deadline for registration on the fourth (4th) day of the semester.

Registration for any course will result in full tuition and fee assessment for the course hours. Any course dropped on or after the first (1st) day of each term or mini-semester will result in charges for the dropped course as determined by the state refund guidelines and approved tuition rates.

All students must initiate the process to be dropped from classes prior to the first (1st) class day or they will be required to make payment for tuition and fees assessed. Students receiving financial aid may not be automatically dropped from classes.

Drops and/or withdrawals may be made online through the posted Last Day to Withdraw for the term. For specific dates, see the *Academic Calendar* section.

Students should contact their professors prior to initiating a drop. A student who discontinues class attendance and does not officially drop the course will receive a performance grade (i.e., A, B, C, D, or F) on his or her official transcript.

International students should contact the International Student Office (ISO) prior to dropping courses. For international students, failure to maintain full-time status* could affect or jeopardize their F-1 Visa and/or immigration status.

Students receiving financial aid or veterans assistance should contact the Financial Aid/Veterans Affairs Office prior to dropping courses.

STUDENT CLASSIFICATIONS

Freshman: A student who has successfully completed fewer than 30 quality hours.

Sophomore: A student who has successfully completed 30 to 59 quality hours

Junior: A student who has successfully completed 60 to 89 quality hours.

Senior: A student who has successfully completed 90 or more quality hours.

Classification varies for courses meeting on alternative or accelerated schedules.

WITHDRAWAL FROM COURSES

Withdrawal Policy: Texas Education Code 51.907

Course Drop Limit Provisions

Students who enroll as an entering freshman or a first-time college student in undergraduate courses at any Texas public community college, technical institute, health sciences institution, or any public university offering undergraduate courses must comply with the legislation of *Texas Education Code 51.907*.

Texas Education Code 51.907 states that students who enrolled for the first (1st) time during the Fall 2007 semester or any subsequent semester are subject to the course drop limit of six (6) course drops. This includes any course a transfer student has dropped at another institution. Collin College counts dropped courses starting in the Fall 2009 semester and forward.

Procedures to Withdraw from a Course(s)

Students may withdraw from a course(s) with a grade of “W” through the end of the eighth (8th) class week during a regular 16-week semester. The withdrawal date for flexible entry classes and mini-session varies. Withdrawals will appear on the student’s official transcript, but have no effect on his or her grade point average (GPA). Contact the admissions area in the Student and Enrollment Services Office for withdrawal deadlines for other terms. Prior to initiating a withdrawal, students should contact their professor(s) and/or an academic advisor. Withdrawal from Collin College must be initiated by the student. Students who discontinue class attendance and do not officially withdraw will receive a performance grade for the course(s).

Students who need to withdraw from a class(es) may do so online or in person in the Student and Enrollment Services Office at any campus. Students may withdraw online through the posted last day to withdraw unless the student has a registration hold(s) or is an international student. In these cases, the student must come to the admissions area in the Student and Enrollment Services Office at any campus to withdraw. The withdrawal deadlines are listed in the *Academic Calendar*.

Students may also withdraw from Collin College by mailing a written request for such action to the admissions area in the Student and Enrollment Services Office. The written

request must include the student’s signature, address, CWID number, date of birth, phone number(s), and the course name(s) and number(s). The date postmarked on the envelope will be the official withdrawal date.

Students who initiate a withdrawal from classes cannot be reinstated once the withdrawal has been processed. Failure to drop or withdraw on or before the last day to withdraw will result in the student receiving a performance grade (i.e., A, B, C, D, or F) on his or her official transcript.

International students should contact the International Student Office (ISO) prior to withdrawing from courses. For international students, failure to maintain full-time* status could affect or jeopardize their F-1 Visa and/or immigration status. Students receiving financial aid or veterans assistance should contact the Financial Aid/Veterans Affairs Office prior to withdrawing from courses.

*Full-time status is 12 credit hours during the Fall and Spring semesters and six (6) credit hours in a Summer session. Full-time status for mini-semester varies. International students whose first semester is Summer or are in the ESL program are required to enroll in Summer sessions.

For more information, contact Student and Enrollment Services on any campus.

REGISTRATION FOR CONTINUING EDUCATION (CE) AND WORKFORCE DEVELOPMENT CLASSES

Each semester Collin College offers Continuing Education (CE) classes to community members through Continuing Education and Workforce Development. Registration for these classes can be done in three (3) ways:

1. Online registration: Registration online at <http://www.collin.edu/ce/registration.html> if you already have a student account at Collin College. Apply at <http://www.collin.edu/ce/application.html> if you are a new student.
2. Phone registration: Call 972.985.3711 and provide the course name, CRN, and credit card information (we accept VISA, Discover, or MasterCard).
3. Walk-in registration: Available at the Celina Campus, Courtyard Center - Plano, Farmersville Campus, Frisco Campus (Preston Ridge), McKinney Campus (Central Park), Plano Campus (Spring Creek), Technical Campus, and Wylie Campus. Times are listed in the current Continuing Education Schedule.

CE Registration is ongoing throughout the semester. Students are encouraged to register at least one week prior to the class start date.

FINANCIAL POLICIES AND PROCEDURES

STUDENT ACCOUNT COSTS

Undergraduate (credit) course tuition and fees are assessed on a per credit hour basis rather than a per course cost. The per credit hour tuition rate is determined by the student's residency classification, as determined by Student and Enrollment Services, and whether a course qualifies for state funding. Additional per course lab or special fees may be assessed, as needed and approved.

Continuing Education (CE) course instructional fees are assessed on a per course basis. The cost of each course is listed in the applicable Continuing Education Schedule located on Collin College's website at www.collin.edu/ce/.

All Collin College tuition and fees, both course and/or service related, must be approved by Collin College's Board of Trustees (Board), are added as necessary, and are kept to a practical minimum. For the most current credit course tuition and fee rates, as well as additional course and/or service specific fees, go to www.collin.edu/bursar/tuition.html.

Average In-state Cost of Attendance (COA) for Credit Students

In addition to the direct costs incurred by a student attending Collin College, the cost of attendance (COA), also known as the budget, is an estimate of anticipated comprehensive costs the typical student would incur for a given academic period. The COA includes not only tuition and fees but also other educational related expenses such as books and supplies, room and board, transportation, and personal expenses.

Standardized costs of attendance are established each year and are applied equally across similar groups of students (e.g., full-time students), providing a more comprehensive budget picture for an academic year or term. Charts showing the average cost of attendance at Collin College are available online at <https://www.collin.edu/financialaid/coa.html>.

Student Financial Responsibility

Registration is required for students to attend courses at Collin College. Registration in any course or acceptance of any service from Collin College creates a contractual obligation and agreement to pay all tuition, fees, and other assessed and/or associated costs resulting from registration and/or receipt of services. The three (3) primary credit terms have an advertised early registration payment deadline. After the initial credit term's payment deadline, and for all CE terms, any registration balance on the student's account is due at the time of registration. It is the student's responsibility to review account balances, comply

with financial aid eligibility requirements and third (3rd) party funding guidelines, and pay any balance due by the established payment deadlines.

By registering for courses at Collin College, the student is acknowledging understanding of, and agreement to, personal financial responsibility, including the following:

- Registration is, in fact, acceptance of financial responsibility and constitutes a promissory note agreement (i.e., a financial obligation in the form of an educational loan, as defined by the [U.S. Bankruptcy Code, 11 U.S.C. §523\(a\)\(8\)](#) in which Collin College is providing educational services, possibly deferring some or all of a payment obligation for those services per payment deadline policies.
- The student promises to pay and/or secure alternate funding for all assessed tuition, fees, and other associated costs and/or balances by the published or assigned due date. The student acknowledges default of payment obligations may result in additional collection activities, assessed charges, and/or account and/or service restrictions.
- The student is responsible for all course registration activity, including drop/withdrawal from courses.
- Registration is only complete upon full funding of courses.
- Charges for dropped/withdrawn credit courses will be assessed in accordance with the [Texas Higher Education Coordinating Board \(THECB\) Refund Rules](#), which specifies 100 percent remission of tuition and fees is only available for courses dropped prior to the beginning of the term or mini-term.
- Charges for dropped CE courses will be assessed per Collin College's published refund rules, which specify 100 percent remission of instructional fees is only available prior to the course start date/time.
- Payment of tuition and fees corresponding to dropped or withdrawn courses is the student's responsibility.
- Failure to attend class or receive a bill does not absolve the student of financial responsibility.
- Per [Texas Education Code 54.007\(d\)](#): A STUDENT WHO FAILS TO MAKE FULL PAYMENT OF TUITION AND MANDATORY FEES, INCLUDING ANY INCIDENTAL FEES, BY THE DUE DATE MAY BE PROHIBITED FROM REGISTERING FOR CLASSES UNTIL FULL PAYMENT IS MADE. A STUDENT WHO FAILS TO MAKE FULL PAYMENT PRIOR TO THE END OF THE SEMESTER OR TERM MAY BE DENIED CREDIT FOR THE WORK DONE THAT SEMESTER OR TERM.

- The Agreement to Collin College's Terms and Conditions of Registration and Agreement to Pay Tuition Charges and Unpaid Student Account Balances is located at www.collin.edu/bursar/Financial_Responsibility.html.

Payment Requirements and Deadlines

Payment deadlines and student account balances are available online. Meeting payment deadline requirements within each registration period is the student's responsibility. Funding must be in place in compliance with payment deadline requirements within the applicable registration period to ensure course enrollment status.

Registration Periods

Early Registration (credit term) is the period from the first (1st) day of registration through the advertised early registration payment deadline. Additional information and the payment deadlines for specific terms are located at www.collin.edu/bursar/payment_deadline.html.

Funding for all charges on the student's account is due in full on or before the early registration payment deadline. Acceptable funding is payment in full, awarded and authorized financial aid, verified third (3rd) party (TP) funding, eligible exemptions/waivers, a promissory note payment plan agreement, or a combination of the above. Students with any outstanding balances not funded in full on or before the published payment deadline may be dropped from all classes by an automated process that same night. Partial funding will not prevent classes from being dropped.

Regular Registration (credit term) for the Fall, Spring, and Summer terms begins after the early registration payment deadline and continues until the day before the term or mini-session begins. Regular registration activity, including Weekend Express or mini-semester registration, must be paid in full or have approved funding noted at the time of registration to prevent the course(s) being dropped for non-payment.

Late Registration (credit term) begins the first (1st) day of the primary part of term for each term (i.e., Fall, Spring, and Summer), and a late fee is assessed for registration initiated the first (1st) week of the term. Late registration activity, including Weekend Express or mini-semester registration, must be paid in full or have approved funding noted at the time of registration to prevent the course(s) from being dropped for non-payment and registration and/or transcript holds being placed on the student's account.

CE registration terms do not provide an early registration period. All funding sources must be in place at the time of registration to prevent drop for non-payment activity

and/or registration and transcript holds being placed on the student's account.

Charges and payments are term specific. When paying online, students need to select the specific term for which they are making payment.

Automatic Course Cancellation, or Drop for Non-payment (DNP), of Tuition

Students with outstanding balances not totally funded by the Early Registration Payment Deadline for Fall, Spring, and Summer credit terms are subject to drop for non-payment (DNP) from **all** courses the day after the published Early Registration Payment Deadline, regardless of whether a partial payment(s) has been made.

During Regular and Late Registration, including CE terms, regardless of course/session start date, registration and payment activity are calculated on a daily reporting cycle. An unpaid balance on **one (1)** class at the close of the business day may cause the student to be dropped from all classes in the same day/reporting period, including those for which the student previously paid. For example, if a student registers for three (3) credit hours or a CE course at 9 a.m., pays Collin College in full, and then registers for three (3) additional credit hours or another CE course at 10 a.m. and does not pay the additional registration at the time of registration, **all six (6) credit hours and/or both CE courses** are subject to DNP.

Additionally, if a student drops a course when the refund amount is less than 100 percent and receives a partial credit on the account for the dropped course, then adds a new course and does not pay the full amount due for both the dropped course and the added course, the registered course may be DNP.

If a student is dropped from a class(es) for nonpayment of tuition, it is the student's responsibility to re-register for classes. There is no guarantee a seat will remain available in the original course(s) for which the student had registered.

CougarPay Access and Services

For students' convenience, student account services are offered and managed in a secure online site accessible from CougarWeb. Student account services available in the CougarPay site include viewing current charges resulting from account activity; accessing e-bills; paying account balances; initiating promissory note installment plans (when available); establishing an e-Refund account to expedite receipt of refunded monies; authorizing limited access to family members assisting with account activity; and opting in for 1098-T electronic delivery, for eligible students. Students are encouraged to explore the CougarPay site and the many services available.

Follow the instructions below to access the secure site:

1. Go to CougarWeb (<https://cougarweb.collin.edu>) and log in with the student's assigned Collin College username and password.
2. From the Student Quick Links select CougarPay (Manage Payments & eRefunds).
3. Select Collin College Account Suite bar to enter the secure payment portal.
4. Select the tab for the desired service and follow the prompts.

Account Statements and Bills

Collin College email is the official means of communicating with students, and billing information for credit students will be provided through their assigned college email account. To activate automated email account notifications, students should initiate at least one (1) login to the CougarPay site. E-bills are generated monthly for any credit student account with a positive or negative balance at that moment in time. Student account history provides real-time account balances as registration or payment/refund activity occurs. Students are responsible for complying with payment deadline requirements, even if an e-bill is not received. Payment deadlines are available on Collin College's Master Calendar located at [2023-2024 Master Calendar-10-24-23.pdf](#) (collin.edu).

Payment Policies

Collin College accepts cash, check, cashier's check, money order, and MasterCard, VISA or Discover payments not to exceed the tuition and fee charges and/or service charges on the student's account. Partial payments are accepted, but the full account balance must be paid in compliance with payment deadline requirements. When writing a check or using a credit card, the student must show a picture identification card (ID) and provide his or her College Wide Identification (CWID) number.

Collin College may refuse or restrict check payments on any account on which a check payment was not honored by the originating financial institution or for payment of any past due account balance.

Incomplete and/or unsuccessful payments, including credit card challenges of selected services, may result in additional fees and/or account or service restrictions.

Payments by paper check are processed through the Automated Clearing House (ACH). For paper checks, the Texas driver's license number of the person signing the check and the student's CWID and local address must be written on the check. If the student prefers to not provide the CWID on the check, payment may be submitted by web check, cashier's check, or money order. Students

requiring payments from out-of-state financial accounts should pay by web check. Check writing privileges will be permanently revoked for students with three (3) or more insufficient funds, rejected, or returned paper or web check payments.

Students may also set up authorized users in CougarPay. Authorized users may make credit card or web check payments on an authorized student's account for tuition and fee charges.

Payment Methods

Collin College accepts the following methods of payment for tuition, fees, and services:

1. Secure online payment is the recommended method. Convenient online credit card or web check payments may be made 24/7 via the CougarPay secure payment portal accessed through CougarWeb (<https://cougarweb.collin.edu>).
2. In-person payments by cash, credit card, check, or money order may be made at any Collin College Bursar/Cashier's Office location during posted business hours.
3. Mailed checks or money orders are accepted with the same requirements as any paper check and are recorded as of the date received, not the postmark. Checks should be mailed to:

Collin College
 Attn: Bursar
 3452 Spur 399
 Suite 327
 McKinney, TX 75069
4. Financial Aid and/or scholarship awards noted on the student's account as Authorized/Anticipated Aid and/or paid amounts for the corresponding term are considered as eligible funding. Students receiving these financial aid and/or scholarship awards sufficient to cover all of the tuition and fee charges do not need to make an additional payment. Students are responsible for completing any financial aid application and/or acceptance process(es) and maintaining current enrollment status.

Authorized financial aid funds for a credit student with certified course activity disburse to the student's Collin College account five (5) to ten (10) business days after the term/mini-sessions census date. Unpaid charges on the student's account will be deducted from any resulting financial aid credit, and then any remaining credit balance will be processed for refund within 10 days.

CE Financial Aid awards are for course costs only and are not eligible for student refunds.

Student accounts with a scholarship credit remaining from an earlier term should verify with the Collin College Foundation Office or other sponsoring department/entity whether those funds may be used for the new term. For more information, see the [Financial Aid and Veterans Services](#) and [Scholarships](#).

5. Gift/prepaid MasterCard, VISA, or Discover card payments are accepted. However, students should not discard the used gift/prepaid card. If a refund is necessary, the amount will be returned to the original gift/prepaid card.
6. During early registration, students may make partial payments as their budgets allow, but the full amount due should be paid by the early registration payment deadline. Paying in increments during early registration provides a no fee, no contract informal payment plan for students.
7. Promissory note installment plans allow students to pay in three monthly installments. The promissory note installment payment plans are available online in CougarPay prior to the Fall, Spring, and Summer credit terms. At the time of enrollment, the student must complete a promissory note, pay 50 percent of all tuition and fees plus a \$25 non-refundable processing charge, and save a payment method for automatic installment payments. The remaining two payments (remaining 50 percent owed) will be due on future predetermined dates. For example, if the installment plan was set up in January, the next payment will be due in February and the third payment in March. If the student adds a course(s) after initiating the installment plan, 50 percent of the new tuition and fee charges incurred is due at the time of registration to ensure course registration status.

The installment promissory note and initial payment for early registration activity must be completed on the specified deadline for each term. After the deadline, the installment agreement and payment must be completed at the time of registration.

Making a partial payment on or after the payment deadline without completing the promissory note does not initiate a payment plan or meet funding requirements.

Stopping a check or credit card payment will not cancel the installment plan. Any credit resulting from dropped or withdrawn courses will be applied to unpaid charges.

Official grades and transcripts may be withheld until all installment plan payments have been made, and default may result in course withdrawal.

8. Third (3rd) Party (TP) funding is accepted if a valid TP agreement between an entity and Collin College is established and/or a voucher from the business or agency verifying the student's eligibility for funding is presented each term to the Bursar/Cashier's Office in compliance with payment deadline requirements.

Students are responsible for any amount owed if the sponsoring agency does not remit payment in full.

Students with TP sponsors who pay for books and/or supplies must meet the Barnes & Noble College Bookstore's TP funding requirements. For more information, contact the preferred campus bookstore.

9. Post 9/11 veteran education benefits are acceptable funding for students with documented eligibility. Eligible students must contact a campus Bursar/Cashier's Office or email cashier@collin.edu each term to authorize use of veterans' benefits.
10. International currency payments are accepted through Collin College's partnership with Flywire. This partnership allows international students to pay securely from any country and bank in their home currency. Payments for an amount equal to current student account charges at Collin College may be paid through Flywire Payment and must be received in the Bursar/Cashier's Office by the applicable payment deadline. For more information, go to <https://www.flywire.com/pay/Collin>.
11. College savings/529 plan check payments are accepted and processed with the same requirements and restrictions as personal paper check payments on the student's account.
12. Exemptions and waivers for qualified students may reduce account balances. Collin College offers numerous state and local Board authorized tuition and/or fee exemptions and waivers for eligible students. A list of exemptions and waivers offered at Collin College, including the appropriate office to contact, brief eligibility requirements, the nature of the exemption or waiver offered, and the authorizing citation or policy, is available online at www.collin.edu/bursar/tuitionwaiversexemptionsrebate.html.

Refunds

Credit term refunds are calculated per state mandated rules. One hundred (100) percent refunds (less non-refundable fees) are only issued for courses dropped prior to each term or mini-session's start date. Each term or mini-session's start date is based on the week the course begins and not the first (1st) day of an individual's class. As of 12:01 a.m. on the first (1st) day of the term/mini-session, refunds assessed for dropped or withdrawn courses will be reduced to 70 percent and then graduated down to zero (0) percent, per the THECB refund rules shown below.

THECB Refund Rules for Credit Course Drop/Withdrawal Percentages				
Course Length (# of Weeks)	100%	70%	25%	0%
	Prior to Class Day	Thru Class Day	Thru Class Day	As of Class Day
16 OR MORE	1	15	20	21
15 WEEKS	1	14	19	20
14 WEEKS	1	13	17	18
13 WEEKS	1	13	16	17
12 WEEKS	1	12	15	16
11 WEEKS	1	10	14	15
10 WEEKS	1	9	12	13
9 WEEKS	1	9	11	12
8 WEEKS	1	8	10	11
7 WEEKS	1	7	9	10
6 WEEKS	1	5	7	8
5 WEEKS	1	5	6	7
4 WEEKS	1	4	5	6
3 WEEKS	1	3	4	5
2 OR LESS	1	2	N/A	3

Note: Sunday is only counted if it is the first (1st) day of the course and only the first Sunday class day is counted. Saturday is not counted for Summer terms unless the course begins on a Saturday, in which case the first (1st) Saturday will be counted.

CE term refunds are calculated per Collin College's published refund rules. Courses dropped prior to the course start time are eligible for a 100 percent refund. As of the course start date/time, CE courses may not be dropped and are not eligible for any refund percentage.

Students should consider the financial consequences before making schedule changes, including changes based on campus, professor, and/or date or time convenience. Students in cancelled classes who do not add another class will automatically be dropped and receive a full refund credit (i.e., 100 percent minus non-refundable fees), which will be included in the scheduled refund process. Any credit(s) generated on a student's account may be applied to outstanding charges before a refund is issued.

Registration refund processing for a credit term begins approximately three (3) weeks after registration opens. CE course refunds are processed on a continuing weekly basis. Eligible credit amounts from registration and/or residency changes may take up to 30 days to be refunded. Financial aid refund processing begins approximately one (1) week after the primary term's census date and after course activity is certified by faculty. Refunds are generally issued in the same form as the payment received. However, system processes may result in refund types that vary from the initial payment type (e.g., an electronic refund to a saved refund account has priority over a credit card refund after financial aid for a term is posted to the student's account). Cash and check payments will be refunded electronically when authorized. Students who do not receive a credit card refund and/or do not authorize an electronic refund will be issued a paper check. Checks are mailed two (2) to five (5) days after electronic refunds are processed to the student's permanent address on file with the Student and Enrollment Services Office. To expedite refunds, students are encouraged to set up electronic refunds on the CougarPay site. Note: Sunday is only counted if it is the first (1st) day of the course (and only the first class day Sunday is counted). Saturday is not counted for Summer terms unless the course begins on a Saturday, in which case the first (1st) Saturday will be counted.

DELINQUENT ACCOUNT/COLLECTION

Accounts not paid when due are subject to holds preventing future registration, receipt of diploma, and/or access to grades and transcripts. Additionally, the student's course enrollment status may be changed to drop for non-payment (DNP) or withdrawn. Students who fail to pay any monies owed by the due date and/or fail to make acceptable payment arrangements to bring their accounts current may have their delinquent accounts referred to an outside collection agency and/or reported to the national credit bureaus. Monies owed include any unpaid amount on the student's account, including, but not limited to, assessed charges for qualified tuition and related education expenses, including resident housing and/or meal plan charges, and/or adjustments to financial aid awards and/or amounts not covered under an approved and eligible third (3rd) party funding agreement. If a student's account is referred to a third (3rd) party for collection, a collection fee will be assessed and will be due in full at the time of the referral to the third (3rd) party. Students are responsible for

all late fees, assessed collection fees, attorney fees, interest, and any costs and charges necessary for the collection of any amount not paid when due. The collection fee will be calculated up to the maximum amount permitted by applicable law, but not to exceed 30 percent of the amount outstanding. If a lawsuit is filed to recover an outstanding balance, the student will also be responsible for any costs associated with the lawsuit. The student further understands and agrees that:

- Collin College may apply monies due to the student from Collin College to any delinquent amount due until the principal account balances, interest, and costs are paid in full;
- Collin College may pay any balance due on the student's account from any Title IV funds awarded and disbursed to the student's account in the same academic award year, including an amount up to \$200 for educationally related expenses incurred in a prior financial aid award year;
- any financial obligation to Collin College constitutes an educational loan to assist in financing education and, therefore, is not dischargeable, pursuant to [United States Bankruptcy Code § 523\(a\)\(8\)](#);
- all disputes about registration or payment will be governed in accordance with the laws of the State of Texas, without regard to the principles of conflicts of laws of the State of Texas; and
- the venue for any lawsuit regarding collection of a delinquent debt will be in Collin County, Texas.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA) AND STUDENT PAYMENT ACCOUNTS

The [Family Educational Rights and Privacy Act \(FERPA\)](#) affords eligible students certain rights with respect to their education records, including student financial accounts. In accordance with [FERPA](#), a student's account and payment information may only be provided to the student. However, a student may grant a family member(s) or other designated individual(s) access to view the student's account information and/or make payments by designating the family member(s) or individual(s) as an authorized user(s) on the CougarPay site. As authorized users, individuals are provided unique login information to access the student's account and make payments.

For more information, see CougarPay Access and Services above and the [Family Educational Rights and Privacy Act \(FERPA\)](#) and [Student Education Records](#) section in the current [Student Handbook](#).

BURSAR/CASHIER SERVICES

Bursar/cashier's staff provide support services for students' financial accounts, including payments and refunds. Course registration and residency classification questions should be addressed to a Student and Enrollment Services staff member. Financial aid questions should be addressed to a Financial Aid and Veterans Services Office staff member. For more information or assistance with student account payments and refund processing, contact cashier@collin.edu.

TUITION AND FEE CHARGES

To see a current list of tuition and fees, visit <https://www.collin.edu/bursar/tuition.html>.

NON-FUNDABLE COURSE TUITION

Texas resident students enrolled in courses not eligible for funding by the State of Texas may be charged a higher tuition rate for each course that is not eligible for state funding at a rate of \$50 per semester credit hour in addition to regular tuition. Examples of non-fundable course tuition being assessed include:

--Courses repeated more than one time - Collin College is generally not permitted to report for state funding those courses that a student has taken for the third time (or more). Exemptions exist for selected types of courses. See the Collin College website <https://www.collin.edu/register/withdrawal.html>

--Courses not approved for funding by the Texas Higher Education Coordinating Board - Collin College offers two courses that are taught specifically to transfer into the programs of a specific university that are not approved for state funding. See the Collin College website <https://www.collin.edu/register/withdrawal.html> for a complete list of courses charged the higher tuition rate.

--Limitations on State Funding for Remedial and Developmental Education Courses- Collin College is limited to reporting no more than 18 semester credit hours for state funding for an individual student taking Remedial and Developmental Education courses/interventions. Up to 9 additional semester credit hours can be reported for funding for English for Speakers of other Languages (ESL) courses/interventions, bringing the maximum allowable to 27 semester credit hours for an individual student.

--Excess Hour Courses-Beginning in the Fall 2023 semester, Collin College will no longer be permitted to report for state funding semester credit hours in excess of specified limits unless those hours are exempted. As a result, in the [Fall 2024](#) semester, Collin College may begin charging non-fundable course tuition for course credits that

constitute excess hours for the student's declared degree plan.

For an undergraduate, Texas-resident student who was initially enrolled in higher education in the Fall 2023 semester and declares pursuit of an associate degree program, the limit on the number of semester credit hours that can be reported for state funding is the required semester credit hours for the degree plus 15.

For an undergraduate, Texas-resident student who was initially enrolled in higher education in the Fall 2023 semester and does not declare pursuit of a degree program, it will be assumed the student is enrolled in a baccalaureate degree program, and the limit on the number of semester credit hours that can be reported for state funding is 150.

For an undergraduate, Texas-resident student who was initially enrolled in higher education in the Fall 2006 or later semester and declares pursuit of a baccalaureate degree program, the limit on the number of semester credit hours that can be reported for state funding is the required semester credit hours for the degree plus 30.

For an undergraduate, Texas resident student who was initially enrolled in higher education in the period from the Fall 1999 semester through the Summer 2006 semester and declares pursuit of a baccalaureate degree program, the limit on the number of semester credit hours that can be reported for state funding is the required semester credit hours for the degree plus 45.

For an undergraduate, Texas resident student who was initially enrolled in higher education in the period prior to the Fall 1999 semester there is no excess hour limit.

Numerous exemptions exist for certain types of credit hours which can be found in [Texas Administrative Code Section 13.104](#).

EXEMPTIONS AND WAIVERS

Partnering with the State of Texas to ensure affordability of higher education for all students, Collin College offers numerous State and local Board-authorized tuition and/or fee exemptions and waivers for eligible students. The exemption and waivers table located online at www.collin.edu/bursar/tuitionwaiverexemptionsrebate.html outlines the exemptions and waivers offered, the Collin College office to contact, summary data on eligibility, nature of exemption/waiver offered, and authorizing citation/policies.

Eligible students should contact the responsible Collin College office to ascertain what documentation is required to prove eligibility. Proof of exemption/ waiver eligibility must be provided for each term of attendance at Collin College. Students are responsible for meeting any eligibility

requirements and providing required documentation to Collin College in compliance with payment deadline requirements to consider exemptions/waivers as a source of funding for the term.

EXEMPTIONS AND WAIVERS AVAILABLE AT COLLIN COLLEGE

Optional or Mandatory	Exemption or Waiver	Description	Office to Contact	Texas Residency Requirement	Exempted/Waived (only applies to state funded courses)	Statute Program	Texas Statute/ Administrative Rules
O	E	Exemption-Ad Valorem Residency	Student & Enrollment Services	No	To resident tuition rate only	Ad Valorem	TEC 130.0032(a)
M	E	Exemption-Adoption	Financial Aid	No	Tuition and fees (excludes pass thru fees)	Adopted	TEC 54.367
M	E	Exemption-Child of Clinical Nursing Preceptor	Financial Aid	Yes	Tuition, not to exceed \$500	Preceptors and/or their Children	TEC 54.356/Ch 22, Sub P
M	E	Exemption-Child of Disabled Fire/Police Officer	Financial Aid	No	Tuition and fees (excludes pass thru fees)	Children of Disabled Firemen/Peace Officers	TEC 54.351
M	E	Exemption-Child of POW/MIA	Financial Aid	Yes (POW sponsor)	Tuition and fees (excludes pass thru fees)	Children of POWs and MIAs	TEC 54.343
M	E	Exemption-Child of Professional Nursing Staff	Financial Aid	Yes	Tuition pro-rated per employment percentage	Children of Nursing Faculty	TEC 54.355/Ch 22, Sub O
M	E	Exemption-Child, Hazlewood Legacy	Financial Aid	Yes	Tuition and course lab fees only (not funded by Chapter 33 benefits)	Hazlewood-Legacy recipients	TEC 54.341 (k)
M	E	Exemption-Child/Spouse of Deceased Public Servant	Financial Aid	No	Books, tuition, and fees	Dependents of Deceased Public Servants	TEC 54.354
M	E	Exemption-Clinical Nursing Preceptor	Financial Aid	Yes	Tuition, not to exceed \$500	Preceptors and/or their Children	TEC 54.356/Ch 22, Sub P
O	E	Exemption-Contract Training	Center for Workforce & Economic Development	No	To resident tuition rate for eligible courses only	Agreement with Junior College District	TEC 130.0081
M	E	Exemption-Deaf and Blind	ACCESS Office	Yes	Tuition and fees (excludes pass thru fees)	Deaf or Blind	TEC 54.364
M	E	Exemption-Disabled Firefighter	Financial Aid	Yes	Tuition and fees (excludes pass thru fees)	Permanently disabled during performance of job duties	TEC 54.352
M	E	Exemption-Disabled Police Officer	Financial Aid	Yes	Tuition and fees (excludes pass thru fees)	Permanently disabled during performance of job duties	TEC 54.352

O	E	Exemption-Dual Credit to In-County Tuition	Student & Enrollment Services & Academic Partnership	No	To in-district tuition rate only	Dual Enrollment--Jr College	TEC 130.008/54.216
M	E	Exemption-Fire Science Undergraduate	Financial Aid	TX Employee	Tuition and lab fees only	Firefighters taking Fire Science Courses	TEC 54.353/Ch 22, Sub T
M	E	Exemption-Foster Care Undergraduate	Financial Aid	No	Tuition and fees (excludes pass thru fees)	Foster Care/TX Dpt Family Protective Svcs	TEC 54.366
M	E	Exemption-Hazlewood Dependent, Disabled sponsor	Financial Aid	Yes	Tuition and course lab/special fees only (not funded by Chapter 33 benefits)	Hazlewood-child/spouse of disabled	TEC 54.341 (a-2) and (b)(1)
M	E	Exemption-Hazlewood Eligible Dependent	Financial Aid	Yes	Tuition and course lab/special fees only (not funded by Chapter 33 benefits)	Hazlewood-child/spouse of deceased	TEC 54.341 (a.2) and (b)(1)
M	E	Exemption-Hazlewood UG	Financial Aid	Yes at time of enlistment	Tuition and course lab/special fees only (not funded by Chapter 33 benefits)	Hazlewood-Veterans	TEC 54.341 (a)
O	E	Exemption-High School Concurrent	Academic Partnership & Testing Center	No, attending local high school and on free and reduced lunch	Tuition and fees (excludes pass thru fees)	Dual Enrollment-Jr College	TEC 130.008/54.216
O	E	Exemption-Highest Ranking Graduate	Student & Enrollment Services	No-TX high school grad	Tuition only	Highest Ranking HS Scholar	TEC 54.301
M	E	Exemption-Law Enforcement	Financial Aid	TX Employee	Tuition and lab fees only	Peace Officer Exemption	TEC 54.3531
O	E	Exemption-Non-funded Course Tuition	Financial Aid (hardship) Student & Enrollment Services (graduation)	Yes	Board approved excess tuition charges for identified course	Approved exceptional circumstances (hardship or term prior to graduation)	Texas Statute/ Administrative Rules Title 19, Part 1, Chapter 13(f)
M	E	Exemption-Prisoner of War	Financial Aid	Yes	Tuition and fees (excludes pass thru fees)	Ex-Prisoners of War	TEC 54.342
O	E	Exemption-Senior Citizen, 65 and older	Student & Enrollment Services	Yes	Tuition only for up to 6 hours	Senior Citizen 65+ for 6 hours	TEC 54.365 (b and c)
M	E	Exemption-Texas Guaranteed	Student & Enrollment Services, then	No	To resident tuition rate only	Texas Prepaid Plan	TEC 54.621.c

		Tuition Plan Residency	Bursar / Cashier				
M	E	Exemption-Texas Tuition Promise Fund	Bursar / Cashier	No	Tuition charges which exceed allowed program payment	Texas Prepaid Plan	TEC 54.621.c
O	E	Waiver-Board Reciprocal County Agreement	Student & Enrollment Services	No	To resident tuition rate only	Inter-institutional Academic Programs	TEC 54.368/130.0032
O	E	Waiver-Collin Support Staff	Student & Enrollment Services	Yes	Out-of-county to in-county tuition only	Community College District Employees	TEC 130.0851
O	W	Waiver-Competitive Scholarship	Athletic Department	No	Non-resident to resident tuition rate	Competitive Scholarship	TEC 54.213/Ch 21, Sub SS
M	W	Waiver-Continuous Military Dependent	Student & Enrollment Services	No, continuous domicile required	To resident tuition rate only	Military in Texas	TEC 54.241(c)
M	W	Waiver-Economic Development	Student & Enrollment Services	No	To resident tuition rate only	Economic Development as identified by the State	TEC 54.222
M	W	Waiver-Faculty and Dependents	Student & Enrollment Services	No	To resident tuition rate only	College Teachers, Profs, etc. and dependents	TEC 54.211
M	W	Waiver-Foreign Service	Student & Enrollment Services	No	To resident tuition rate only	Foreign Service Officer	TEC 54.206
O	W	Waiver-Good Neighbor	Student & Enrollment Services	No	Tuition as approved by THECB	Good Neighbor/Students from Other Nations of the American Hemisphere	TEC 54.331/CH 21, Sub K
M	W	Waiver-Military and Dependents	Student & Enrollment Services	No, but active duty orders or continuous presence	To resident tuition rate only	Military in Texas	TEC 54.241
M	W	Waiver-NATO Alien	Student & Enrollment Services	No	To resident tuition rate only	NATO Members and Families	TEC 54.232
M	W	Waiver-Teacher Research Assistant	Student & Enrollment Services	No	To resident tuition rate only	Teaching and Research Assistants	TEC 54.212
M	E	Waiver-Texas National Guard Tuition Reimbursement	Bursar / Cashier	No	Tuition and fees up to amount allocated by adjutant general	National Guard Waiver	TEC 54.345
M	W	Waiver-Veterans and Dependents	Student & Enrollment Services	No, DD214 plus	To resident tuition rate only	Military in Texas	TEC 54.241(i and k)

FINANCIAL AID AND OTHER RESOURCES

FINANCIAL AID

As a service to Collin College students, the Financial Aid Office administers a comprehensive financial aid program that includes grants, loans and part-time employment for those who meet the eligibility requirements. A primary purpose of the Collin College financial aid program is to provide assistance for students who might otherwise find it difficult or impossible to attend college. All students are encouraged to apply for financial aid.

If students have questions or need assistance, they can contact the Financial Aid Office via phone or visit any campus Financial Aid Office. Financial aid staff is trained to assist students in realizing their educational goals by answering questions, providing appropriate forms and instructions, and referring students to other resources as needed.

For more information, please visit the Financial Aid Office webpage at: <https://www.collin.edu/financialaid/>.

Students receiving financial aid should not withdraw from all of their classes without first consulting the Financial Aid Office. In addition, all financial aid students must become familiar with the standards of academic progress required to remain eligible for financial aid.

Federal law requires a financial aid student to complete at least 60 percent of each semester. If a student completely withdraws before the 60 percent point in the semester, that student will need to repay a portion of the financial aid funds received. A financial aid student who earns a grade of "F" for all courses in a semester must have at least one (1) instructor provide proof to the Financial Aid Office that the student was in an academically related activity for 60 percent of the semester. Otherwise, that student will owe money back to the financial aid program.

APPLYING FOR AID

Students can apply for aid online using the Free Application for Federal Student Aid (FAFSA) located at <http://www.fafsa.gov/>. Collin College's Title IV School Code is **016792** and must be reported on the FAFSA application in order for aid to be processed by Collin College.

DEADLINES

Students must apply for financial aid each year. Students wanting to receive priority consideration should apply as early as possible. The new FAFSA is typically available Oct. 1 each year. Collin College uses the State of Texas' priority deadline of January 15. Students who meet the priority deadline will have aid in place before the payment deadline.

FINANCIAL AID PROGRAMS – FEDERAL ASSISTANCE

Actual award amounts are determined by federal guidelines, a demonstration of need, and the student's enrollment. Collin College participates in the following financial aid programs:

FEDERAL PELL GRANT

Eligibility for the Pell Grant is based on the financial need of the student and/or the student's family, as well as the student's enrollment status.

Financial need is determined by the U.S. Department of Education from information provided on the student's FAFSA (Free Application for Federal Student Aid). The standard formula, established by Congress, produces an Expected Family Contribution (EFC) that indicates how much a student, and their spouse or family, is expected to contribute financially toward the cost of their education. EFC's within a particular range (varies by year and consists of those students determined to have the "most need") will be eligible for Pell Grant provided the student meets all other eligibility criteria.

In general, only undergraduate students are eligible to receive a Pell Grant. A student who has earned a baccalaureate or a first professional degree is not eligible to receive a Pell Grant.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITIES GRANT (FSEOG)

FSEOG is limited by the availability of funds and is awarded to those students considered to have exceptional financial need. Priority is given to federal Pell Grant recipients.

FEDERAL WORK STUDY

Students demonstrating financial need may be considered for the work study program. Students are employed part-time at various jobs on campus or at other College District approved sites. Students are allowed to earn the amount designated in their award package as long as they maintain a 2.0 GPA and are enrolled in at least six credit hours.

FEDERAL DIRECT LOAN PROGRAM

This program permits students to borrow low-interest loans from the Department of Education provided the student is enrolled and attending at least half time and otherwise meets eligibility criteria. The federal government pays interest on the subsidized (need based) amount borrowed until the student graduates or ceases to be enrolled at least half time. Unsubsidized loans (non-need based) are also available to otherwise eligible students.

Students are responsible for the interest accruing on these loans while attending school.

DIRECT PARENT LOANS TO UNDERGRADUATE STUDENTS (PLUS)

PLUS loans are available to parents who want to borrow money to help defray the cost of their dependent children's education. Like Direct loans, PLUS loans are offered by the Department of Education. Parents may borrow up to the cost of attendance minus any other educational resources and financial aid awarded to students. These loans have a higher interest rate than direct loans and the borrower is responsible for paying all the interest that accrues.

FINANCIAL AID PROGRAMS – STATE ASSISTANCE

Texas Public Education Grant (TPEG)

The TPEG program is a state financial aid program designed to assist students in attending state-supported colleges. Students must demonstrate financial need and be making satisfactory academic progress toward their educational goals. The actual amount of the grant varies depending on the availability of funds to the college, the student's financial condition and enrollment, and other aid the student may be receiving.

Texas Equal Opportunity Grant (TEOG)

Community college students working on their first associate's degree may be eligible for this grant if they:

- Are a Texas resident
- Do not have a felony or a drug conviction
- Are within their first 30 hours of college
- Registered for Selective Service, if required
- Have financial need, as determined by the institution
- Are enrolled at least half-time (six hours)

Students who meet the qualifications are eligible for up to 75 hours at a community college. Additionally, a student receiving this grant may become eligible for the Texas Grant once they transfer to a university. For the first year, students must meet the college's Satisfactory Academic Progress (SAP) requirements. (Please refer to the Institutional Policy of Satisfactory Academic Progress listed below for more information.) To continue receiving this grant, the student must maintain a 2.5 cumulative GPA, and complete at least 75 percent of their coursework.

For additional information about either of the above grants, please contact the Financial Aid Office.

SATISFACTORY ACADEMIC PROGRESS (SAP)

School policy: 34 CFR 668.16(e); Student eligibility: 34 CFR 668.32(f), 34 CFR 668.34

To be considered administratively capable, a school must have a satisfactory academic progress policy for a Federal Student Aid (FSA) recipient that is the same as or more strict than the school's standards for a student enrolled in the same educational program who is not receiving assistance under a FSA program.

Basic Elements of a Satisfactory Progress Policy

According to these federal rules, a school's policy must contain certain basic elements:

- a **qualitative component** consisting of grades or comparable factors that are measurable against a norm (a GPA component)
- a **quantitative component** that consists of a maximum time frame in which a student must complete his or her educational program, subdivided into increments (aka the 150 percent rule)
- a **measurement of progress**, meaning the student must be completing a certain percentage of classes to be considered making adequate progress.

STUDENT ELIGIBILITY

To be eligible for Federal Student Aid (FSA) funds, a student must make satisfactory academic progress as defined by the school.

WHAT IS YOUR SAP STATUS?

An explanation of the different SAP statuses can be found on the college's website at <https://www.collin.edu/financialaid/SAP%20Status%20on%20Web.pdf>. Students can also see this explanation in the financial aid section of their CougarWeb.

INSTITUTIONAL POLICY OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID (EFFECTIVE NOVEMBER 2013)

This is an official statement of Collin College policy related to the financial aid operational definition of Satisfactory Academic Progress for students at Collin College effective for 2013-14 and subsequent academic years.

At the end of each period of enrollment, the Financial Aid Office evaluates satisfactory academic progress of all enrolled students. This evaluation considers Financial Aid GPA, the percentage of hours completed and maximum allowed hours attempted. Please note the evaluation takes place at the end of Fall, Spring and Summer.

At the end of each period of enrollment, a student must meet the following requirements:

I. Grade Point Average (GPA) Requirement

A student must maintain a Financial Aid GPA of 2.0 or higher in order to receive federal student aid. The Financial

Aid GPA is the calculation of grades from all credit coursework, including developmental and ESL coursework. Please note, that the Financial Aid GPA may differ from the Academic GPA.

II. Percent Completion Requirement

A student must complete 67 percent of all attempted hours; calculated by dividing the total number of hours the student has successfully completed by the total number of hours attempted.

- a. Successfully completed hours: Passing grades of A, B, C and D, (including developmental and ESL coursework), accepted transfer coursework and repeated courses (one time only for previously passed course).
- b. Attempted hours: Withdrawals, grades of F, incomplete courses, repeated courses, courses taken during the Summer sessions, developmental and ESL coursework, accepted transfer coursework and all hours for which student received passing grades are counted toward attempted hours. Please note, all periods of enrollment count when assessing progress, even periods in which a student does not receive federal student aid.

III. Maximum Time Frame Requirement

The maximum number of hours a student may attempt is limited to 150 percent of the published length of the program. For example, a certificate program that requires 30 hours would have a maximum time frame of 45 credit hours.

All hours, including those taken while not receiving Title IV aid, those taken under a different major, hours attempted during Summer sessions, remedial hours, ESL hours and hours transferred in from previous/other institutions, etc., shall be counted towards total hours attempted and earned. Students that reach the maximum time frame are immediately given a status of "Exceeds Max Hours," making them ineligible for any student aid, including student loans, state aid, etc.

FAILURE TO MEET THE STANDARDS OF ACADEMIC PROGRESS – GPA AND PERCENT COMPLETION

A student who fails to meet the requirements in I and/or II above will automatically be placed on warning for the next semester of enrollment. Students on warning will still be able to receive student financial aid they would otherwise be eligible to receive.

At the end of the next semester of enrollment, the student must be making Financial Aid satisfactory academic progress (Financial Aid GPA of 2.0 or greater and a cumulative percent completion of 67 percent or higher). If the student is not making satisfactory academic progress by the end of the semester, they will automatically be placed

on financial aid suspension and will no longer be eligible for any student aid including loans, state aid, etc.

Students on financial aid suspension for Financial Aid GPA and/or percent completion will remain on suspension until such time that the Financial Aid GPA and/or percent completion reaches the minimum requirements. Once the minimum requirements are met, the student will again be considered to be in good standing.

THE APPEAL PROCESS – GPA AND PERCENT COMPLETION

In rare circumstances, a student is allowed to appeal his/her financial aid suspension. These circumstances may include a serious personal illness documented by a doctor, the serious illness of an immediate family member where the doctor documents that the student was required to give care to the family member and other rare, exceptional circumstances that prevent a student from attending class. The circumstances must have occurred during the semester(s) of attendance.

Please note that appeals will not be accepted without documentation and that appeals submitted with documentation are not automatically approved. The deadline for submitting an appeal is 30 days after the official first day of classes for a semester.

A student who meets the condition to appeal must complete and submit the Financial Aid Satisfactory Academic Progress Appeal form, along with **required documentation** that supports the rare circumstances, to the Financial Aid Office. The appeal must also contain a **typed** letter explaining the circumstances that the student faced and what measures have been taken so that the same problem does not negatively impact their academic progress again.

THE APPEALS COMMITTEE

An appeals committee has been established at Collin College to review all financial aid appeals. The committee will meet as needed to review the appeals. The determination of the appeal will be sent to the student through CougarWeb. Appeals without documentation or that do not meet the requirements of the appeal process will automatically be denied.

A student, whose appeal is approved for GPA or percent completion, must complete a financial aid academic plan. In order to remain eligible for financial aid while on an academic plan, the student may not withdraw from any coursework and must make a grade of at least "C" in every class until the student is back in good standing. A student whose appeal is approved for maximum timeframe will have the approved hours added to the 150 percent of the program length. All decisions of the Financial Aid Appeals Committee are final.

ADDITIONAL INFORMATION: RETURN OF TITLE IV FUNDS

Title IV aid is earned in a prorated manner on a per diem basis up to and including the 60 percent point in the term. After the 60 percent point all aid is considered earned. The percentage earned is calculated by dividing the number of days completed by the number of days in the repayment period. It is the unearned percentage of aid that determines the amount that must be returned to the Title IV program(s) in the following order: Unsubsidized Direct Loan, Subsidized Direct Loan, Direct Parent PLUS Loan, Pell Grant and SEOG. The student is not responsible for returning funds to any program to which the student owes \$50 or less. The grant funds returned by the student are applied to the following sources in the order indicated, up to the total amount disbursed from that grant program minus any grant funds the school is responsible for returning to that program. Title IV Grant Program sources include: Pell and SEOG.

The Department of Education considers a student who earns all "F"s to have unofficially withdrawn unless an instructor can prove otherwise. The college, as well as the student may be required to return to the federal government the unearned portion of the Title IV funds. The institution will require students to repay charges resulting from the institution's portion of the return of unearned Title IV aid. This may cause the students to owe both the college and the federal government. Students withdrawing prior to disbursement may be eligible for a post-withdrawal disbursement. Students who are considering withdrawing should contact the Financial Aid Office for a thorough explanation of how this policy will affect them.

FINANCIAL AID PROGRAMS – OTHER

TUITION EXEMPTIONS

State tuition waivers and exemptions provide qualifying students with exemptions from certain tuition and fee charges in public colleges.

Beginning with the 2014-2015 year, the State of Texas Legislature updated the rules and requirements for exemptions under SB1210. These rules state that for most types of exemptions, students must:

- Be seeking a degree or certificate
- Have prior credit evaluated and applied toward the degree or certificate* (this includes both transfer work and any prior credits earned at Collin College)
- Meet the Financial Aid satisfactory academic progress requirement of a 2.0 GPA (excludes hours earned exclusively by examination, hours earned when the student is dual-enrolled and hours earned for developmental coursework)

- Have not completed, at the beginning of each semester, an excess of hours as defined by the school.

If on the completion of any semester, a student fails to meet any of the above eligibility requirements, the student may not receive the exemption for the next semester in which the student enrolls. Students may become eligible in a subsequent semester if they complete a semester or semesters on their own and are once again meeting the eligibility requirements.

For students with a rare, extenuating circumstance (as described in the Financial Aid section), they may submit an appeal with supporting documentation. See the instructions for submitting appeals in the Financial Aid section of this catalog or on the College's website at: <https://www.collin.edu/financialaid/SAP.html>.

Contact either the Financial Aid Office or Student and Enrollment Services for additional information regarding a specific waiver or exemption. A few of the state exemptions and waivers are listed below.

FINANCIAL AID EXEMPTIONS

Deaf/blind students • adopted students and students who were in foster care • children of deceased or disabled fireman and peace officers • children of prisoners of war or persons missing in action • firemen enrolled in fire science courses • police officers enrolled in law enforcement or criminal justice courses • children of professional nursing staff • Hazlewood Act • orphans of national guard members

ADMISSIONS WAIVERS

Ad-valorem tax • concurrent enrollment • contract training for out of district students • dual agreement with Dallas County • senior citizen

VETERAN EDUCATIONAL BENEFITS

Students requesting veteran educational benefits at Collin College should submit all documentation to the Financial Aid (FA) and Veteran Services (VSO) Office at least **six weeks prior** to registration, if possible. The steps necessary to do this include:

1. Gain admission to Collin College through the Admissions Office.
2. Submit a degree plan request and all required VA forms to the Financial Aid & Veteran Services Office.
3. Ensure all official transcripts from prior institutions are submitted to the degree plan coordinator (Registrar's Office) for transfer evaluation. This includes the Joint Services Transcript or the Community College of the Airforce transcript. *

PLEASE NOTE: Only after an official degree plan is on file will notification of enrollment be sent to the Department of Veterans Affairs. Only classes that are on the official degree plan will be paid for. It is the student's responsibility to ensure the degree program selected is a program approved by the Texas Workforce Commission and the Department of Veterans Affairs.

* A degree plan will NOT be completed until all OFFICIAL transcripts and the DD214 (where applicable) are on file with the Admissions Office. Failure to submit all official transcripts (and the DD214 where applicable) in a timely manner will result in a delay of certification of enrollment and/or non-certification if the student registers for courses for which previous credit may be granted.

Any class that is recommended but not required by a degree program cannot be certified with the VA. Additionally, classes required for graduation at another institution, but not by Collin College, cannot be certified. Developmental courses will only be certified if the student has assessed into the course(s) and only if the class is not a distance or web class. Pod, flex and blended courses are all considered traditional courses by the VA. Therefore, developmental courses in one of these formats are eligible for certification. However, if the developmental course is listed as online, web or distance, it is not eligible to be certified.

Veteran students' enrollment is certified according to the date of registration as long as the degree evaluation has been completed. Therefore, it is strongly recommended that veteran students register for classes as early as possible each semester.

It is the student's responsibility to notify the Financial Aid & Veteran Services Office whenever they change their schedule (i.e., add or drop classes). The student is responsible for registering for the correct courses. The VA will only pay for courses required for graduation. Please be careful when taking elective course. They may not be eligible for certification.

It is assumed that continuing students want to be certified for any subsequent enrollment unless they notify the Financial Aid & Veteran Services Office in writing. Requests for certification of a prior term will be processed in accordance with standard VA policy and will not be processed ahead of the normal scheduled workload for that term.

If the student has not been in attendance for two regular 16-week semesters, additional VA documents will be required, as well as any transcripts from any schools in attendance during the break.

All degree plan changes must be made through the Financial Aid & Veteran Services Office. Please contact the FA/VS Office on campus. Allow at least six weeks for the

new degree plan request to be evaluated. It is the student's responsibility to notify the FA/VS Office once the degree plan has been completed.

VETERANS ACADEMIC PROGRESS

Students receiving veteran benefits must maintain satisfactory academic progress while attending Collin College. Satisfactory academic progress is defined as:

1. Maintaining a 2.0 cumulative GPA. Students failing to make satisfactory academic progress will be reported to the Veterans Regional Office as being on academic suspension at the end of the second consecutive semester when the cumulative GPA remains below 2.0. Developmental courses will be included to determine the cumulative GPA.
2. A grade of "D" or better received at Collin College or any other college is a passing grade and may not be repeated for benefits. If a non-punitive grade of "F" is assigned to a course and is not converted to a punitive grade, this will be reported to the Veterans Affairs Regional Office within 30 days and benefits will be reduced accordingly. Students receiving a grade of "F" may repeat the course with benefits **one time** at Collin College.
3. Withdrawal from a class, whether self-initiated or otherwise, may result in the student being obligated to repay any overpayment of benefits unless the VA approves written extenuating circumstances submitted by the student.
4. Regular class attendance is required to provide necessary documentation of attendance.

COLLIN COLLEGE FOUNDATION SCHOLARSHIPS

Through generous contributions from individuals, corporations, alumni, and friends, the Collin College Foundation awards scholarships to qualified students who are pursuing their associate degrees. Scholarships are available to incoming freshmen, returning students, and high school dual credit seniors who will be or are currently enrolled at Collin College.

Students can apply online during two (2) open application cycles, which include mid-January through March and mid-September through October each year.

For more information, call 972.599.3147, email scholarshipcoordinator@collin.edu, or go to www.collin.edu/foundation.

ATHLETIC AND DEPARTMENTAL SCHOLARSHIPS

Scholarships are available for men's and women's basketball and tennis. Athletic Competitive Scholarships are awarded on the basis of athletic ability, contribution to

Collin College as a student-athlete, and [National Junior College Athletic Association \(NJCAA\)](#) eligibility. Athletic Competitive Scholarships are awarded in compliance with NJCAA bylaws. For more information, contact the Athletic Department at 972.516.5025 or go to <http://athletics.collin.edu/landing/index/>.

Additional scholarships may be available through Collin College's academic departments. For more information, contact the appropriate academic/workforce dean.

ACADEMIC POLICIES AND PROCEDURES

ACADEMIC STANDING

All students are encouraged to work toward achieving their goals and maintaining scholastic progress throughout their enrollment at Collin College.

GOOD ACADEMIC STANDING

Students are considered in good academic standing if a 2.0 or higher cumulative grade point average (GPA) is maintained.

RECOGNITION FOR ACADEMIC ACHIEVEMENT

All students who complete 12 or more quality credit hours during a regular (16-week) term with a current 3.5 GPA or above qualify for the Deans' List. All students who complete 12 or more quality credit hours during a regular (16-week) term with a current 4.0 GPA qualify for the President's List.

ACADEMIC WARNING

All students whose GPA falls below a cumulative GPA of 2.0 will be placed on Academic Warning at the end of that semester.

ACADEMIC PROBATION

All students whose cumulative GPA remains below 2.0 after Academic Warning will be placed on Academic Probation. Students whose cumulative GPA remains below 2.0 after being placed on academic probation will continue on academic probation status as long as their semester GPA is 2.0 or higher, or until the Cumulative GPA is again above 2.0.

A student on academic probation will be limited to a maximum of 13 credit hours per semester.

ACADEMIC SUSPENSION

All students whose cumulative and semester GPA remains below 2.0 after Academic Probation will be placed on Academic Suspension. After remaining out of school for a semester, a student may return on academic probation.

A student on suspension has the right to appeal to the Academic Appeals Committee.

ACADEMIC APPEAL

Students placed on Academic Suspension have the right to appeal to the Academic Progress Appeals Committee (APAC). The process allows students to appeal an Academic Suspension for unsatisfactory academic progress based upon extenuating circumstances.

Appeals must be received by the deadline listed on the Master Calendar and Academic Standing webpage. All students placed on Academic Suspension will be notified via their Collin College email with instructions on the appeal process and deadline. Decisions made by the Academic Progress Appeal Committee (APAC) are final.

TRANSFER STUDENTS

A student coming in from another college/university will be placed on good standing with Collin College their first semester. After the first semester, the student will follow Collin College's academic standing procedures.

CLASS ATTENDANCE

Regular classroom attendance is expected of all students. Professors determine class attendance requirements; therefore, students should ascertain each professor's attendance policy on the first day of the class. Students who receive Department of Veterans Affairs educational benefits must conform to attendance and academic standards as established by the college.

Federal regulations require students to attend class by the census date to receive financial aid. Students in online courses must submit an assignment by the census date to be considered as attending. Students who stop attending may have to pay a portion of their financial aid back to the Department of Education.

Please contact Financial Aid or Veteran Affairs for more information.

ENROLLMENT VERIFICATION FOR STUDENTS (SELF-SERVICE)

This program provides students with online access to enrollment verification services from the National Student Clearinghouse. By using a link on the college website, students can achieve the following:

- Print a certificate of enrollment that can be forwarded to a health insurer, housing provider, credit issuer, employment agency or other student service providers.
- View enrollment information that may have been provided to a student service provider.
- View electronic notifications and deferment forms that have been sent to lenders, service providers and guarantors.
- View a list of their lenders and link to real-time student loan information details, such as

outstanding principal balance and the next payment due date that some lenders provide. Go to <http://www.collin.edu>.

Click on the CougarWeb link and log into CougarWeb. Click on the Home Page tab. Click on “Enrollment Verification” under the Student Quick Links tab. Follow the instructions for printing an enrollment verification.

Students may contact the National Student Clearinghouse directly at 703.742.7791 or www.studentclearinghouse.org for further questions concerning their enrollment verifications.

RELIGIOUS HOLY DAYS

In accordance with Section 51.911 of the Texas Education Code, Collin College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time. Students are required to file a written request with each professor prior to the census date of the course to qualify for an excused absence. A copy of the state rules and procedures regarding holy days is available from the Student and Enrollment Services Offices. The form for notification of absence from each class under this provision is located at <https://www.collin.edu/admissions/forms.html>.

STUDENT RECORDS AND PROCEDURES TO INSPECT/REVIEW AND TO AMEND EDUCATION RECORDS

Family Educational Rights and Privacy Act of 1974 (FERPA)

The [Family Educational Rights and Privacy Act of 1974 \(FERPA\)](#) is a federal law that protects the privacy of students’ education records. *FERPA* gives students the right to inspect and review their education records and the right to request that an institution correct records the student believes to be inaccurate or misleading. Additionally, *FERPA* governs the disclosure of students’ education records.

Texas Government Code Section 559.003

With few exceptions, state law (i.e., [Texas Government Code Section 559.003](#)) gives students the following rights regarding the information collected about them by Collin College:

1. The right to request to be informed about the information,
2. The right to receive and review the information, and
3. The right to correct information that is incorrect.

Custodians of Records

The Registrar is custodian of all records for currently enrolled students and for all official academic records. The district dean of students is custodian of all student disciplinary records.

Types of Education Records

Each record custodian will be responsible for the education records of Collin College. These records may include:

1. Admissions data, and personal and family data.
2. Standardized test data, including intelligence, aptitude, interest, personality, and social adjustment ratings.
3. All achievement records, as determined by tests, recorded grades, and teacher evaluations.
4. Attendance record.
5. Records of faculty, academic advisers, counselors, or administrative conferences with the student or pertaining to the student.
6. Disciplinary records, including scholastic disciplinary actions.
7. Copies of correspondence with parents and others concerned with the student.
8. Records transferred from secondary schools and other postsecondary institutions in which the student has been enrolled.
9. Records pertaining to participation in student activities including academic awards or recognition by Collin College.
10. Information relating to student participation in special programs.
11. Records of tuition and fees paid and outstanding.
12. Financial aid records.
13. Job placement records.
14. Scholarships or other financial awards.
15. Records pertaining to student complaints.
16. Other records that may contribute to understanding of the student.

Procedure to Inspect/Review Records

Collin College will make a student’s records available to the student. The records custodian or designee will use reasonable procedures to verify the requestor’s identity before disclosing student records containing personally identifiable information.

Records may be reviewed in person during regular business hours without charge, upon written request to the records custodian. For in-person viewing, the records custodian or designee will be available to explain the records and to answer questions. The confidential nature of the student’s records will be maintained at all times. Records to be viewed will be restricted to use only in the College District President’s Office or other restricted area designated by the

records custodian. The original copy of the records or any document contained in the comprehensive records will not be removed from Collin College.

Copies of records must be requested in writing and will be available at a per copy cost, payable in advance. Financial hardship cases will be dealt with on an individual basis. A student may be denied copies of records if the student fails to follow proper procedures or pay the copying charge. Contact the Registrar at 972.881.5707 or email registrar@collin.edu for procedures on students' rights of inspection, review, and correction of education records.

DISCLOSURE OF EDUCATION RECORDS

Collin College will disclose information from a student's education records with the student's prior written consent or as permitted by law. Examples of disclosures not requiring a student's prior written consent include, but are not limited to, the following.

1. To the student and to the parent of a student who is a dependent for tax purposes.
2. To other school officials, including faculty, within Collin College whom Collin College has determined to have legitimate educational interests.
3. To officials of another school, school system, or institution of postsecondary education in which the student seeks or intends to enroll, or where the student is already enrolled, so long as the disclosure is for purposes related to the student's enrollment or transfer.
4. To authorized representatives of the officials or agencies headed by the comptroller general of the United States, the attorney general of the United States, the secretary of education, or state and local educational authorities who require access to student or other records necessary in connection with the audit and evaluation of federal- or state-supported education programs or in connection with the enforcement of or compliance with federal legal requirements that relate to such programs.
5. In connection with financial aid for which the student has applied or which the student has received, if the information is necessary for such purposes as to determine the eligibility for the aid, determine the amount of the aid, determine the conditions for the aid, or to enforce the terms and conditions of the aid.
6. To state and local officials or authorities to whom this information is specifically allowed to be reported or disclosed pursuant to state statute adopted:
 - a. Before November 19, 1974, if the allowed reporting or disclosure concerns the juvenile justice system and its ability to effectively serve the student whose records are released, or
 - b. After November 19, 1974, if:
 - i. The allowed reporting or disclosure concerns the juvenile justice system and its ability to effectively serve, prior to adjudication, the student whose records are released; and
 - ii. The officials and authorities to whom such information is disclosed certify in writing to the educational agency or institution that the information will not be disclosed to any other party, except as provided under state law, without the prior written consent of the parent of the student.
7. To organizations conducting studies for or on behalf of educational agencies or institutions to develop, validate, or administer predictive tests, administer student aid programs, and improve instruction.
8. To accrediting organizations to carry out their accrediting functions.
9. To comply with a judicial order or lawfully issued subpoena;
10. If legal action is initiated, Collin College may disclose relevant information from a student's education records to the court, without a court order or subpoena.
11. In connection with a health or safety emergency. Collin College may disclose personally identifiable information from an education record to appropriate persons, including the parents of an eligible student, in connection with an emergency if knowledge of the information is necessary to protect the health or safety of the student or other individuals.
12. Directory information (as defined in the [Directory Information](#) section below) in accordance with FERPA, unless the student restricts directory information.
13. To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense. The disclosure may only include the final results of the disciplinary proceeding conducted by Collin College with respect to that alleged crime or offense. Collin College may disclose the final results of the disciplinary proceeding regardless of whether Collin College concluded a violation was committed. If the alleged victim is deceased as a result of such crime or offense, Collin College will treat the alleged victim's next of kin as the alleged victim, in accordance with the law;
14. To a parent of a student at Collin College regarding the student's violation of any federal, state, or local law, or of any rule or policy of Collin College, governing the use or possession of alcohol or a controlled substance if:
 - a. Collin College determines that a student has committed a disciplinary violation with respect to that use or possession; and

- b. The student is under the age of 21 at the time of the disclosure to the parent. The disclosure concerns sex offenders and other individuals required to register under [Section 170101 of the Violent Crime Control and Law Enforcement Act of 1994, 42 U.S.C. 14071](#), and the information was provided to Collin College under *42 U.S.C. 14071* and applicable federal guidelines.

DIRECTORY INFORMATION

“Directory information” means information contained in an education record of a student that would not generally be considered harmful or an invasion of privacy if disclosed. Directory information will be released to a qualified individual or organization that files a written request with the Registrar or designee.

Collin College will give public notice of the categories of information designated as directory information; whether the disclosure of directory information will be limited to specific parties, for specific purposes, or both; and the period of time after such notice for a student to inform Collin College that any or all of the directory information should not be released without prior consent.

Directory information includes, but is not limited to, the student’s:

1. Name;
2. Address;
3. Telephone listing;
4. Official Collin College-issued email address;
5. Photograph;
6. Major field(s) of study;
7. Dates of attendance;
8. Participation in officially recognized activities and sports;
9. Weight and height of members of athletic teams;
10. Degrees, honors, and awards received; and
11. Most recent previous educational agency or institution attended.

Directory information does not include a student’s Social Security Number (SSN) or College-Wide Identification Number (CWID).

A student may request directory information be withheld from the public by completing the Release of Student Information Form in CougarWeb, <https://cougarweb.collin.edu>. If no request is filed, directory information will be released upon inquiry. Filed requests are valid until revoked by the student in writing. Directory information is the only part of a student’s record that may be released without the student’s prior written permission, except with regard to the law that provides for disclosure without consent.

Students may also authorize parents or other individuals to access their grades by completing the Release of Student Information Form in CougarWeb, <https://cougarweb.collin.edu>. Students will need their CougarWeb usernames and passwords to access the system.

Transcripts and Transfers of Records

Collin College may request transcripts from previously attended schools for students transferring into Collin College; however, the ultimate responsibility for obtaining transcripts from sending schools rests with the student. For purposes of a student’s enrollment or transfer, Collin College will promptly forward education records upon request to officials of other schools or school systems in which the student intends to enroll or enrolls. Collin College District may return an education record to the school identified as the source of the record.

Procedure to Amend Records

Within 15 College District business days of the record custodian’s receipt of a request to amend records, Collin College will notify the student in writing of its decision on the request and, if the request is denied, of the student’s right to a hearing. If a hearing is requested, it will be held within 15 College District business days after the request is received.

Students will be notified in advance of the date, time, and place of the hearing. An administrator who is not responsible for the contested records and who does not have a direct interest in the outcome of the hearing will conduct the hearing. The student will be given a full and fair opportunity to present evidence, and at their own expense, may be assisted or represented at the hearing.

The student will be notified of the decision in writing within 10 College District business days of the hearing. The decision will be based solely on the evidence presented at the hearing and will include a summary of the evidence and reasons for the decision. If the decision is to deny the request, the student will be informed that they have 30 College District business days within which to exercise their right to place in the record a statement commenting on the contested information and/or stating any reason for disagreeing with Collin College’s decision.

Complaints

A student who needs assistance or wishes to file a complaint under *FERPA* should do so in writing to the Family Policy Compliance Office by sending pertinent information concerning any allegation(s) through the mail to the following address:

Family Policy Compliance Office
 U.S. Department of Education
 400 Maryland Avenue, SW
 Washington, D.C. 20202-5920

STUDENT RIGHT TO KNOW

Under the terms of the Student Right to Know Act, the college maintains and annually updates student persistence, graduation rates, transfer rates, and other relevant statistics. To access this information, go to Collin College's Institutional Research Office website <http://www.collin.edu/aboutus/statistics/>.

GRADING SYSTEM

At the completion of each term, the college will determine the student's semester and cumulative grade point averages, which will be recorded on the student's official transcript. Grades earned in developmental education courses are not included in the grade point average. Grades are available through the CougarWeb Registration system.

Grade	Grade Points Per Semester Hour
A Excellent	4
B Above Average	3
C Average	2
D Below Average	1
F Failure	0
W Withdrawn (Not included in GPA or Earned Hours.)	0
WS Withdrawal Affected (Not included in GPA or Cumulative Hours Counts in State six W/D limit.)	0
WZ Withdrawn by Department (Not included in GPA or Earned Hours.)	0
I Incomplete	0
IP in Progress (0 grade points per semester hour. Student completed 70 percent but has not reached competency.)	0
AD A - Developmental	0
BD B - Developmental	0
CD C - Developmental	0
DD D - Developmental	0
FD F - Developmental	0
AT Excellent	0 (Transfer)
BT Above Average	0 (Transfer)
CT Average	0 (Transfer)
DT Below Average	0 (Transfer)
AU Audit (Not included in GPA or Earned Hours)	0
CR Credit	0

(Included in Earned Hours but not GPA Hours. Used for Advanced Placement, College Level Exam Program, Credit by Exam, Articulated Credit and Tech Prep.)

P Pass	0
(Not included in GPA or Earned Hours)	
T Non Course Base	0
TASP remediation	
X	0
Pending Dean of Student Case	
XF	0
Administrative Assignment of Failure (Not included in GPA or Earned Hours)	
XW	0
Administrative Withdrawal (Not included in GPA or Earned Hours)	
Z	
No grade reported. Instructor did not assign a grade.	
ZW	0
Administrative withdraw due to a fraudulent act of scholastic dishonesty. (Not included in GPA or Earned Hours)	
NP	
Not passed.	
NR	
Not reported.	

INCOMPLETE GRADES AND CONTRACTS

The "I" grade is assigned only for extenuating circumstances. Incomplete contracts must be agreed to and signed by the student, professor, and appropriate academic dean before the end of the term in order for a grade of "I" to be assigned.

The contract must define the exact requirements (not to exceed 20 percent of the coursework) the student is to fulfill in order to receive a performance grade. If remaining work is greater than 20 percent of the coursework, the approval of the Campus Provost is required. Requirements of incomplete contracts must be completed as specified in the contract, but no later than the end of the next long semester.

The contract will state that if the work is not completed as specified, the grade will be changed to a performance grade based on the quality and amount of work completed. If the instructor does not initiate a grade change by the end of the next long semester, the grade will be changed by the Registrar's Office to an "F" or other performance grade indicated on the original contract.

PASS/FAIL GRADE OPTION

Non-degree-seeking students may select a pass/fail grade option for foreign language, sign language, and creative writing courses. When taking a class pass/fail, a letter grade will not be assigned for the course, but the student's transcript will indicate whether he or she passed or failed the course. This option is not available for students working toward a degree plan or intending to transfer to another institution. To select a pass/fail grade, the student must complete the appropriate form

in the Registrar's Office on or before the census date of the term. Pass/fail students may change their status to credit before the census date of the term in the admissions area in the Registrar's Office.

AUDITING COURSES

Students may choose to audit certain classes. A student who is auditing a class(es) will not receive grades or credit for the course, but his or her transcript will indicate the course was audited. A student who is auditing a class(es) will not be required to take tests; however, participation in regular class activities is expected.

Applied music lessons (MUAP), computer systems, Developmental Education (DE), engineering, foreign language, ROTC, sign language, studio arts, and technology classes may not be audited.

Any student intending to audit a course must have completed admissions requirements and be eligible to register for that course in person on the first (1st) day of classes. Audit students are subject to the usual registration process and must meet all admissions policies and guidelines. A non-refundable audit fee is assessed for each class in addition to regular tuition and fees. Students who audit are not eligible to drop or withdraw from the course or print from computers in the libraries or computer labs.

Students who have already registered for a course as credit may not later change their status to audit. However, audit students may change to credit status prior to the term's census date. Students admitted under special admissions are not eligible to audit courses.

REPEATING COURSES

Texas residents attempting a course more than twice at Collin College are subject to regular tuition plus an additional \$50 per semester credit hour charge. Undergraduate courses attempted at Collin College with a graded status of A, B, C, D, F, I, W (withdrawals after census), and AU (audit) will be evaluated for repeat limits.

Refer to the Collin College website for a complete list of courses exempt from the course repeat tuition and how to qualify for exemptions from the higher tuition rate at:

<https://www.collin.edu/register/withdrawal.html>.

Students in excess of 18 Developmental Education (DE) hours will be assessed the authorized \$50 per hour additional tuition. ESOL students in excess of 27 Developmental Education (DE) + ESOL hours will be assessed the authorized \$50 per hour additional tuition.

Grades of all courses taken will be recorded on the student's transcript. When a course is repeated:

- only one (1) course grade will be counted in a student's grade point average (GPA), and
- the highest grade will be used in GPA calculations.

Courses repeated before the Fall 2008 semester will have only the last grade and credits earned (whether higher or lower) used in computing the GPA and applied toward degree or program requirements.

Veterans should consult the Financial Aid/Veterans Affairs Office before repeating any course. Students planning to transfer to another college or university should check repeat policies with a Collin College academic advisor and the receiving institution.

GENERAL EDUCATION/CORE CURRICULUM

The Texas Education Code requires all public colleges and universities to have a General Education/Core Curriculum and every degree has a General Education/Core requirement. The General Education/Core Curriculum is defined as "the curriculum in the liberal arts, humanities, sciences, and political, social and cultural history that all undergraduate students of a particular Texas institution of higher education are required to complete before receiving an associate or baccalaureate degree. The General Education/Core Curriculum focuses on strengthening six foundational competencies that help define the educated person: Communication, Critical Thinking, Empirical and Quantitative Reasoning, Teamwork, Social Responsibility, and Personal Responsibility.

CORE CURRICULUM COMPLETION FOR ASSOCIATE OF ARTS (AA), ASSOCIATE OF SCIENCE (AS) AND ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREES

The designation "Core Complete" is placed on the transcript of all students completing Collin College's General Education/Core Curriculum. The State of Texas guarantees acceptance by a public four-year university of any complete General Education Core transferred from any other Texas public college.

The General Education/Core Curriculum at Collin College is a collection of 42 credit hours of general education courses selected by Collin College faculty in eight areas that have been approved by the Texas Higher Education Coordinating Board to build a basic foundation of knowledge. Course options are displayed by area and discipline in the General Education/Core Curriculum Table. Unless otherwise stated, all general

education/core course options shown in the General Education/Core Curriculum Table can be used to satisfy both core and degree requirements for the Baccalaureate, AA, AS, and AAT degrees. Students should visit with an academic advisor to ensure the best selection of courses to complete the General Education/Core Curriculum.

Becoming Core Complete for Students Who Transfer

All core courses in the 030 Life and Physical Sciences Component at Collin College earn four credit hours, which are distributed as three hours applied to the 6-credit hour requirement for the 030 Life and Physical Sciences Core Component, and one lab credit hour is applied to the 090 Collin Option Area 2 requirement. There are several transfer scenarios for becoming core complete for the student who transfers in 3, 6, or 7 credit hours of Life and Physical Sciences.

If you transfer to Collin College with one 3-credit hour Life and Physical Science course with a grade of D or better, three credit hours will be applied toward the 6-credit hour Life and Physical Sciences Core requirement. You will need to take one additional Life and Physical Science Core course at Collin.

If you transfer in six or seven credit hours of Life and Physical Sciences with a grade of D or better, you will have met the 6-credit hour requirement for the 030 Life and Physical Sciences Core Component.

To meet the 6-credit hour requirement in the 090 Collin Option, all students who transfer to Collin College with 3, 6 or 7 credit hours of Life and Physical Sciences Core coursework, will need to take or transfer in one 090 Collin Option Area 1 Speech course, and up to 3 semester credit hours of Area 2 core coursework in order to be Core complete in both the 030 Life and Physical Sciences Core Component and the 090 Collin Option.

The Area 2 core coursework may be chosen from the following list: EDUC 1100*, EDUC 1300*, KINE 1164, KINE 1304, or KINE 1338. Finally, a student may choose to take (or transfer in) any other course within the Collin College Core curriculum that is not already being used to satisfy another core curriculum requirement.

*Either EDUC 1100 or EDUC 1300 may be used to satisfy the core curriculum requirement.

COLLIN GENERAL EDUCATION/CORE CURRICULUM (Baccalaureate and AA/AS/AAT degrees)		
Discipline	Courses	Notes
010 Communication Component 6 Credit Hours		
English	ENGL 1301 and either ENGL 1302 or 2311	
020 Mathematics Component * 3 Credit Hours		
Mathematics	MATH 1314, 1316, 1342, 2320, 2412, 2413, 2414, 2415	These courses satisfy the AS, AA, & AAT Math requirement
	MATH 1324, 1325, 1332*, 1350, 1351	These courses apply only to the AA or AAT
* Check with academic advising regarding degree applicability. Some majors or institutions may require a higher-level mathematics course.		
030 Life & Physical Sciences Component ** 6 Credit Hours		
Biology	BIOL 1406, 1407, 1414, 1415, 2401, 2402, 2406, 2416, 2421	A two-course sequence is recommended.
Chemistry	CHEM 1411, 1412, 2423, 2425	
Environmental Sciences	ENVR 1401, 1402	These courses satisfy the AS, AA, & AAT Science requirement.
Geology	GEOL 1403, 1404	
Physics	PHYS 1401, 1402, 2425, 2426	Students who transfer to Collin with fewer than 8 credit hours of Life & Physical Science credits should see "Becoming Core Complete"
Biology	BIOL 1408, 1409, 2404, 2420	These courses only satisfy the AA or AAT Requirement.
Chemistry	CHEM 1405	
Geology	GEOL 1401, 1402, 1445, 1447	
Physics	PHYS 1403, 1404, 1405, 1410, 1415, 1417	
**1 hour of each 4 hour Life & Physical Sciences course will be transcribed as 090 Collin Options , up to 2 credit hours.		

040 Language, Philosophy & Culture Component 3 Credit Hours		
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2341	
History	HIST 2311, 2312, 2321, 2322	
Humanities	HUMA 1301	
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321	
050 Creative Arts Component 3 Credit Hours		
Dance	DANC 2303	
Music	MUSI 1306, 1307, 1310	
Theatre	DRAM 1310, 2361, 2362, 2366	
Visual Arts	ARTS 1301, 1303, 1304, 1313	
060 American History Component 6 Credit Hours		
History	HIST 1301, 1302, 2301	
070 Government/Political Science Component*** 6 Credit Hours		
Government	GOVT 2305 and 2306	
***Students who took only one of GOVT 2301 or GOVT 2302 prior to the 2013-2014 Academic year, should see an Advisor to determine how to complete the 070-Government/Political Science Foundational Component Area.		
080 Social and Behavioral Sciences Component 3 Credit Hours		
Anthropology	ANTH 2302, 2346, 2351	
Criminal Justice	CRIJ 1301	
Economics	ECON 1301, 2301, 2302	
Psychology	PSYC 2301	
Sociology	SOCI 1301, 1306	
090 Collin Options 6 Credit Hours		
Area 1 – Speech 3 credit hours	SPCH 1311, 1315, 1321	
Area 2 - 3 credit hours	EDUC 1100*, 1300*, KINE 1164, 1304, 1338, Or Any core course not used to meet the requirement of another component. * Only one of these courses may be taken.	Students who complete 8 credit hours of Life and Physical Sciences will have 2 of those credit hours apply to the 090 Collin Options, Area 2 requirement. See core course options that may be used to fulfill the remaining 1 credit hour requirement. If a student earns more than 42 core credit hours, the extra hours may be applied to degree requirements.
Note: Students who transfer to Collin with 3-7 credit hours of Life & Physical Science credits should see "Becoming Core Complete" on the previous page for more information.		

General Education Component of Associate of Applied Science (AAS) Degrees

The general education component of all Associate of Applied Science (AAS) degrees composed of 15 semester credit hours of general education coursework that must include a distribution of coursework from three broad categories of general education as shown below:

- At least three semester credit hours from humanities/fine arts;
- At least three semester credit hours from social/ behavioral sciences; and,
- At least three semester credit hours from natural sciences/ mathematics.

Additionally, Collin College requires all students completing an AAS degree to earn three semester credit hours in communication by completing ENGL 1301-Composition I. The final general education course requirement is typically chosen by each workforce program to complement the technical content taught in each degree program.

Some AAS degree plans require specific general education courses in each workforce program to support the technical courses in the area of study. Other AAS degree plans allow students to choose from a selection of specified courses to meet their general education requirements.

See the specific degree plan for general education requirements. If options are listed in the degree plan, refer to the table of AAS General Education Courses to view the available course choices.

(See the table of AAS General Education Courses on the right.)

AAS GENERAL EDUCATION COURSES	
See specific degree plan for required courses or any options. Refer to this table only if the degree plan indicates options are available or that students may select an alternative to the course listed.	
Mathematics / Natural Sciences Area	
Mathematics	MATH 1314, 1316, 1324, 1325, 1332*, 1342, 1350, 1351, 2320, 2412, 2413, 2414, 2415
Biology	BIOL 1406, 1407, 1408, 1409, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2420, 2421
Chemistry	CHEM 1405, 1411, 1412, 2423, 2425
Environmental Science	ENVR 1401, 1402
Geology	GEOG 1401, 1402, 1403, 1404, 1445, 1447
Physics	PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 1417, 2425, 2426
Humanities/Fine Arts Area	
Dance	DANC 2303
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2341
History	HIST 2311, 2312, 2321, 2322
Humanities	HUMA 1301
Music	MUSI 1306, 1307, 1310
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321
Theatre	DRAM 1310, 2361, 2362, 2366
Visual Arts	ARTS 1301, 1303, 1304, 1313
Social/Behavioral Sciences Area	
Anthropology	ANTH 2302, 2346, 2351
Criminal Justice	CRIJ 1301
Economics	ECON 1301, 2301, 2302
Government	GOVT 2305, 2306
History	HIST 1301, 1302, 2301
Psychology	PSYC 2301
Sociology	SOCI 1301, 1306
Speech Courses	
See the specific degree plan to determine if there is any Speech requirement. Not all AAS degree plans have this requirement.	
Speech	SPCH 1311, 1315, 1321

* Check with academic advising regarding transferability. Some majors or institutions may require a higher-level mathematics course.

REQUIREMENTS FOR BACCALAUREATE DEGREES, ASSOCIATE DEGREES, AND CERTIFICATES

Students may graduate under any approved degree plan from the preceding five (5) years as long as they were enrolled during that year; however, students may benefit from graduating under the requirements of the current degree plan. Degrees and certificates that have been deactivated by the Texas Higher Education Coordinating Board (THECB) must be completed within three (3) years of the date the program ended.

BACCALAUREATE DEGREES

The Bachelor of Science in Nursing (BSN), the Bachelor of Applied Science (BAS) or the Bachelor of Applied Technology (BAT) are awarded to students who earn a minimum of 120 college-credit hours, complete 42 SCH of core curriculum coursework, and meet all departmental requirements. Twenty-five (25) percent of the credits applied to these degrees (30 SCH) must be earned at Collin College.

BACCALAUREATE DEGREE REQUIREMENTS

1. Earn a minimum of 120 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Complete 78 credit hours of additional requirements specific to each degree.
4. Earn a minimum cumulative grade point average (GPA) of 2.0.
5. Earn a minimum of 30 credit hours at Collin College.

ASSOCIATE DEGREES

The AA, AS, and AAT degrees are designed for students planning to transfer course credits to a baccalaureate degree program at a college or university. Students should visit with an academic advisor to select courses that apply to their AA, AS, or AAT degree. Twenty-five (25) percent of the credits applied to these degrees (15 SCH) must be earned at Collin College.

The **Associate of Arts (AA)** in General Studies degree serves as Collin College's Multidisciplinary Studies Degree Program, and as such is the college's most flexible degree program. Students may also choose to complete AA degrees that incorporate specific Field of Study curricula.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS

The following requirements must be met for an AA:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.¹
3. Complete a minimum of 18 additional credit hours of degree requirements or general studies electives. General Studies electives may be drawn from any college-level credit course.²
4. Earn a minimum cumulative grade point average (GPA) of 2.0.
5. Earn a minimum of 15 credit hours at Collin College.

¹ *Some AA degrees incorporating specific Field of Study (FOS) curricula (e.g. AA with Music FOS) do not require students to complete the core curriculum due to the size of the FOS curriculum. Students can complete these AA degrees at Collin without completing the core curriculum. Students will complete the core curriculum at their transfer institution when completing a subsequent baccalaureate degree.*

² *While general studies electives may be drawn from any college-level credit course offered by Collin College, many credit workforce courses may not transfer to four-year institutions. These courses are noted with a (W) at the end of the course description. Check with your transfer institution for transferability and applicability to your bachelor's degree.*

The **Associate of Science (AS)** degree serves students intending to major in academic disciplines at the baccalaureate level that require more advanced preparation in science and mathematics. Students may choose from an AS degree in General Studies or specific AS degrees that incorporate certain Field of Study curricula.

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

The following requirements must be met for an AS:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.¹
3. Complete a minimum of 18 additional credit hours of degree requirements or general studies electives. General studies electives may be drawn from any college-level credit course.²
4. Earn a minimum cumulative grade point average (GPA) of 2.0.
5. Earn a minimum of 15 credit hours at Collin College.
6. Complete both AS degree requirements:
 - Complete at least six credit hours of mathematics from the following list: MATH 1314, 1316, 1342, 2305, 2318, 2320, 2412, 2413, 2414, 2415. Three credit

hours of this mathematics requirement will also meet the Mathematics Core requirement.

- Complete at least 8 credit hours of Life and Physical Sciences from the following list:
 - BIOL 1406, 1407, 1414, 1415, 2401, 2402, 2406, 2416, 2421
 - CHEM 1411, 1412, 2423, 2425
 - ENVR 1401, 1402

 - GEOL 1403, 1404
 - PHYS 1401, 1402, 2425, 2426

¹ Some AS degrees incorporating specific Field of Study (FOS) curricula (e.g. AS with Civil Engineering, Electrical Engineering or Mechanical Engineering FOS) do not require students to complete the core curriculum due to the size of the FOS curriculum. Students can complete these AS degrees at Collin without completing the core curriculum. Students will complete the core curriculum at their transfer institution when completing a subsequent baccalaureate degree.

² While general studies electives may be drawn from any college-level credit course offered by Collin College, many credit workforce courses may not transfer to four-year institutions. These courses are noted with a (W) at the end of the course description. Check with your transfer institution for transferability and applicability to your bachelor's degree.

A Science course sequence is recommended for the AS degree. Completion of two of these Science courses with a grade of D or better will meet the six-credit hour Life and Physical Sciences Core requirement and two credit hours from the lab portion will be applied to the 6-credit hour Component Area Option Core requirement.

The **Associate of Arts in Teaching (AAT)** degree serves students intending to transfer into baccalaureate degree programs that lead to initial Texas teacher certification.

ASSOCIATE OF ARTS IN TEACHING DEGREE REQUIREMENTS

The following requirements must be met for an AAT:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
4. Earn a minimum of 15 credit hours at Collin College.

5. Complete all the courses listed for one of three AAT diplomas:

- AAT – Early Childhood – Grade 6
- AAT – Middle Grades (Grades 4-8)
- AAT – High School (Grades 8-12)

Associate of Arts (AA) and Associate of Science (AS)

In order for a student to graduate with an Associate of Arts (AA) or Associate of Science (AS) degree from Collin College, he or she must successfully complete all required course hours for the program, have a cumulative 2.0 GPA, and have passed both areas of the Texas Success Initiative (TSI).

Associate of Applied Science (AAS)

In Associate of Applied Science (AAS) degree programs that do not include a college-level Math course, students must successfully complete all required course hours for the program and have a cumulative 2.0 GPA. For more information, see the [Texas Success Initiative](#) section.

Change to the Texas Success Initiative (TSI) Graduation Requirement

In the Summer of 2018, the Collin College Academic Policy and Procedure Committee approved a change to the Texas Success Initiative (TSI) requirement for graduation. Students meet TSI through the successful completion of a required college-level course with a grade of D or higher.

Associate of Applied Science (AAS) degrees are intended to prepare students with the necessary skills to obtain entry-level employment in a variety of career fields. As such these degree programs collectively comprise Collin College's workforce education programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

The following requirements must be met for an AAS degree:

1. Earn 60-68 credit hours as shown in the entry for each degree in this catalog.
2. Complete a minimum of 15 credit hours of General Education/Core Curriculum courses.
3. Earn a minimum cumulative grade-point average (GPA) of 2.0.
4. Earn a minimum of 25% of the credit hours (15-17 credit hours) for the AAS degree at Collin College.

GRADUATE GUARANTEE FOR AAS GRADUATES

The Graduate Guarantee for Associate of Applied Science (AAS) Graduates will be used for accountability purposes. The guarantee assures the

graduate's employer that the graduate has met program competencies and will offer up to nine (9) tuition-free hours of education for a program graduate judged by the employer to be unable to perform on the job the competencies as specified in the college program. To be eligible to apply for the benefits of this guarantee, the employer must have hired the graduate within one year of his/her graduation from the AAS program, and a written request to the appropriate Vice President/Provost must be submitted by the employer OR the graduate within 90 days of the graduate's initial employment.

CERTIFICATES OF COMPLETION

FIELD OF STUDY (FOS) CURRICULA/CERTIFICATES

Collin College grants a certificate to students completing Field of Study (FOS) curricula in the disciplines listed below. The FOS courses are statutorily required to be accepted as the first two years of program coursework in a related bachelor's degree. To earn a Field of Study certificate, a student must complete at least 25% of the credit hours for the certificate at Collin College, and a student must earn a minimum cumulative grade point average of 2.0.

Fields of Study certificates are available in the following disciplines:

- Business
- Communication*
- Computer Science & Information Technology*
- Criminal Justice
- Drama*
- Economics*
- Engineering
- Fine Arts*
- Music
- Political Science
- Psychology
- Sociology

*In July 2020, the Texas Higher Education Coordinating Board (THECB) voted to further review the new Field of Study curricula that were scheduled to go into effect in Fall 2020. Collin College has five FOS Certificates that were affected by this action. The THECB action may limit the applicability toward the corresponding majors at state-supported colleges or universities. Students enrolled in one of these Field of Study certificates are encouraged to meet with an academic advisor and/or contact their transfer institution to make sure courses in the certificate will be degree applicable to their bachelor's degree at the transfer university.

CERTIFICATE AWARDS ASSOCIATED WITH WORKFORCE EDUCATION PROGRAMS

Students obtaining level 1, level 2 or enhanced skills certificates must complete at least 25 percent of the award coursework in residence at Collin College and must earn a cumulative grade point average of 2.0. Students earning certificates may participate in commencement ceremonies. Candidates for a certificate should submit an application for graduation at the beginning of the semester of completion. These awards are also designed as a stepping stone toward earning Associate of Applied Science Degrees.

OCCUPATIONAL SKILLS AWARDS ASSOCIATED WITH WORKFORCE EDUCATION PROGRAMS

Occupational Skills Awards (OSA) are nine to 14 credit hour awards that add to the student's marketability or make the student eligible for immediate employment. These awards are also designed as a stepping-stone toward earning certificates or the Associate of Applied Science AAS degree. To earn an occupational skill award a student must complete 25% of the award coursework at Collin College and must earn a cumulative grade point average (GPA) of 2.0.

TRANSFER OF CREDIT

Students who transfer to Collin College from other institutions of higher education may be awarded credit according to the conditions that follow.

1. Credit must have been earned at an institutionally accredited institution of higher education. Foreign transcripts will not be evaluated or accepted.
2. An official transcript from all institutionally accredited institutions of higher education attended by the student must be on file at Collin College.
3. Official course descriptions from the catalog under which the student attended may be required for evaluation.
4. Credit for courses equivalent to those listed in the Collin College Catalog will be accepted if the courses are required on the student's degree plan for graduation. Other credits may be accepted in lieu of elective courses depending on the student's area of study.
5. Repeats rules from other institutions may vary and Collin College will follow what is listed on transcripts if a student has repeated the same course at one institution multiple times.
6. Grades of "D" are accepted from other institutions; Grades of "F" and "I" will not transfer.
7. While there is no limit on the number of hours that can be transferred into Collin College from other institutions, 25 percent of

- a degree/certificate awarded by Collin College must be earned from Collin College.
8. Time limits and minimum grade requirements may be imposed for transfer work into select areas of study. Contact the academic dean's office for details.
 9. Collin College does not evaluate transcripts or award transfer credit earned at foreign institutions; however, students may be eligible for credit through examination at the college.
 10. Fall 1985 through Summer 2008 transfer work was included in students' overall GPA. Beginning Fall 2008 transfer work is not included in GPA.

Collin College degree plan coordinators conduct official transcript evaluations. Students must be currently admitted to Collin College to request a degree plan.

The ultimate goal at Collin College is to produce educated and productive students, knowledgeable in their chosen area of study. As part of Collin College's commitment to transfer students, the college has partnered with various colleges and universities to establish transfer articulation agreements, special pre-admission agreements and degree plans that provide students access to and linkages with their baccalaureate degree-granting institutions. Not only do these partnerships help students transition from Collin College to their chosen four-year institution – they also foster a more confident and successful student. Transfer resources for students are located on the Transfer U website at:
<http://www.collin.edu/transferu/index.html>.

COMMON COURSE NUMBERING

To help meet the transfer needs of its students, Collin College is a member of the Texas Common Course Numbering System (TCCNS) Consortium. All Texas community/junior colleges and many Texas universities are also using this numbering system.

The Texas Common Course Numbering System provides a shared, uniform set of course designations for students and their advisors to use in determining both course equivalency and degree applicability of transfer credit on a statewide basis.

Students should not assume that only courses with common course numbers will transfer and should see a Collin College academic advisor for assistance.

GUARANTEE FOR TRANSFER CREDIT

Collin College guarantees the transferability of course credits to Texas colleges and/or universities that participate in the Guarantee for Transfer Credit

program. The guarantee applies to students who have met the requirements for its Associate of Arts, Associate of Arts in Teaching or Associate of Science degrees and students who have met the 60-credit hour transfer plan.

This guarantee is designed for Collin College students who have made firm decisions about their major and the transfer college or university to which they plan to transfer, and who have followed a written transfer guide for that transfer institution.

RESOLUTION OF TRANSFER DISPUTES

Collin College works closely with colleges and universities to make the transfer process as smooth as possible for courses transferred to Collin College from the other institutions and follows guidelines to resolve transfer disputes.

The Texas Higher Education Coordinating Board has established procedures to be followed when transfer credit for lower division courses listed in the Academic Course Guide Manual (ACGM) is disputed. The individual courses covered by this procedure are defined in the coordinating board's guide entitled, "Transfer of Credit Policies and Curricula."

PROCEDURES FOR RESOLUTION OF TRANSFER DISPUTES

The following procedures shall be followed by public institutions of higher education in the resolution of credit transfer disputes involving lower-division courses. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course is denied. The receiving institution will also give the reasons for denying credit for a particular course or set of courses at the request of the sending institution. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with board rule and/or guidelines.

If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution whose credit is denied for transfer shall notify the commissioner of the denial.

The Commissioner of Higher Education or the commissioner's designee shall make the final determination about the dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

TRANSCRIPTS

Requests for official transcripts are made online through the college website (<http://www.collin.edu/studentresources/support/transcript.html>) and cost \$5 each.

COLLEGE CREDIT FOR PRIOR LEARNING

Various assessment options enable persons who have acquired knowledge and skills in non-traditional ways to demonstrate academic achievement. The primary goal of Collin College's Credit for Prior Learning procedure is to recognize the diverse ways that students acquire knowledge and skills outside a traditional college setting. Awarded credit for prior learning may accelerate completion of a certificate and/or degree for students who have met college and program admission requirements. Students may petition for prior learning credit if they:

- are currently enrolled or have been enrolled at Collin College within the past five years, and
- meet the admission requirements of the declared program for which they intend to petition for credit for non-traditional (or prior) learning experiences.

The act of petitioning for credit for prior learning does not guarantee that credit will be awarded to the petitioning student; rather, the petition provides the student the opportunity to have the knowledge and skills obtained via prior learning experiences assessed for the award of college credit.

Note: Non-refundable assessment, administrative, and/or transcript recording fees may apply. Certain prior learning assessments may have expiration periods or limited time frames during which credit may be awarded.

AWARD OF PRIOR LEARNING CREDIT ON TRANSCRIPTS AND APPLICATION TO REQUIREMENTS FOR DEGREES AND CERTIFICATES

Credit awarded through Prior Learning Assessment (PLA) will be added to the transcript only upon request and after the student has earned three semester credit hours of non-developmental course credit at Collin College. Course credit awarded through Prior Learning Assessment will not be used to compute student grade point averages, and students should be aware that credit earned by prior learning assessment is not guaranteed to transfer. Students who plan to transfer to another institution should consult with the receiving institution on GPA requirements and course transferability before petitioning for credit by PLA. A student completing any degree or certificate at Collin

College **must** earn at least 25% of the credit for the degree or certificate by completing coursework at Collin College. Under no circumstances will credit awarded by PLA exceed 75% of the coursework applied toward a degree or certificate. Students are encouraged to talk with the academic department of interest for details on the maximum amount of credit that may be awarded and applied toward a specific degree or certificate by PLA.

LIMITATIONS ON CREDIT FOR PRIOR LEARNING

Prior learning credit may not be requested –

- for a previously completed credit course in which the student earned a performance grade (A-F) or a “W”. (Please note: a course must be dropped before census date to avoid a “W” grade. If a student is currently enrolled in a course for which he/she wishes to request PLA credit, the student must withdraw from the course prior to the census date of the enrolled semester in order for the PLA request for that course to be eligible for consideration.)
- for partial credit;
- more than once for a specific course.

Prior learning credit previously applied at another institution of higher education does not automatically transfer to Collin College.

For more information on Prior Learning Credit, please visit

<https://www.collin.edu/academics/priorlearningassessment.html>.

PRIOR LEARNING ASSESSMENT OPPORTUNITIES

ADVANCED PLACEMENT EXAMINATION (AP)

Students who have received college-level training in secondary school and who have scores of three, four, or five on the appropriate Advanced Placement examination may be granted, on request, placement and credit for comparable courses at the college.

- Students must have a declared program and must have completed three semester credit hours at Collin College before credit is awarded on the student's transcript. (Developmental education courses do not count towards this three-credit hour requirement).
- Official AP score reports should be sent to college code 1951 from the student's The College Board account.
- For more information, e-mail CreditByExam@collin.edu. Please refer to the Collin College website for the full list of allowable

credits for AP exams:

<https://www.collin.edu/studentresources/testing/creditbyexam/ap.html>

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

Most publicly-supported colleges and universities have agreed to accept as transfer credits all CLEP credit granted by institutionally accredited colleges/universities using the criteria below. Students planning to use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. CLEP exams are not evaluated for credit at Collin College. The college uses the following criteria for CLEP exam evaluation:

- Students must have a declared program and must have completed three semester hours at Collin College before credit is awarded on the student's transcript. (Developmental education courses do not count towards this three-credit hour requirement).
- Credit is awarded for CLEP exam scores at or above specified levels. See the Collin College CLEP web page (address shown below) or e-mail CreditByExam@collin.edu for specific passing scores. Official score reports should be sent to college code 2290.

For each CLEP examination, a non-refundable administrative and examination fee will be charged. For information on taking a CLEP exam, please e-mail CreditByExam@collin.edu. Please refer to the Collin College website for the full list of allowable credits for CLEP exams:

<https://www.collin.edu/studentresources/testing/creditbyexam/clep.html>

INTERNATIONAL BACCALAUREATE DIPLOMA (IB)

The International Baccalaureate diploma is an international program of courses and exams offered at the high school level. Collin College will award specific college credit in subject appropriate areas on all IB exam scores of 4 or above, with an IB diploma or certificate. Students must have an official IB transcript sent to Collin College. Please refer to the Collin website for the full list of allowable credits for IB exams:

<https://www.collin.edu/studentresources/testing/creditbyexam/ib.html>

Students must have a declared program and must have completed three semester credit hours at Collin College before credit is awarded on the student's transcript. (Developmental education courses do not count towards this three-credit hour requirement).

ARTICULATED COLLEGE CREDIT FOR SELECT HIGH SCHOOL COURSES

Students who elected to take Collin College articulated courses in high school may be eligible to receive college credit for those courses upon high school graduation. These credits are completely tuition free and are awarded based on successful completion of an end-of-course assessment.

The requirements to receive college credit are:

- Students must have a declared program and must have completed three semester hours at Collin College before credit is awarded on the student's transcript. (Developmental education courses do not count towards this three-credit hour requirement).
- Submit the petition for articulated credit within 12 months of high school graduation to a Special Admissions Coordinator.
- Earn a passing grade* on the end-of-course assessment in high school.
- Submit an official final high school transcript along with the petition. Articulated high school credits must be notated on the high school transcript.

Upon completion of the above steps, the college credit that a student is qualified for will be applied to the college transcript at the end of the college grading cycle. For more information, call the Dual Credit Office at 469.365.1850.

*Passing course grades may vary. Check with a Special Admissions Coordinator for details.

MILITARY CREDIT

In addition to applying credit earned at other institutions, students may receive college credit by presenting evidence of having satisfactorily completed a program of military training for which equivalent college credit may be given in accordance with the American Council on Education Standards and Recommendations. The Veteran Transition Specialist evaluates Armed Forces credit. If awarded, credit for military training will be awarded upon receipt of a student's DD214 or documentation of active service (Reserves, active duty, or honorable discharge) such as a Joint Services Transcript (JST).

- Students must have a declared program and must have completed three semester credit hours at Collin College before credit is awarded on the student's transcript. (Developmental education courses do not count towards this three-credit hour requirement).

CERTIFICATIONS AND LICENSURES

In some academic departments, the faculty has determined equivalent course credit for professional certifications and state licensures. Course credit is based on competencies demonstrated through successful completion of the certification or state licensure assessment.

- Students must have a declared program and must have completed three semester credit hours at Collin College before credit is awarded on a student's transcript. (Developmental education courses do not count towards this three-credit hour requirement).
- Certifications and state licenses must be current and valid.

CREDIT BY EXAM (DEPARTMENTAL EXAMS)

Credit for some courses may be granted upon successful completion of a comprehensive examination over the content of the course. A nonrefundable fee is charged for each course examination.

- Students must have a declared program and must have completed three semester hours at Collin College before credit is awarded on the student's transcript. (Developmental education courses do not count towards this three-credit hour requirement).
- Credit by exam may be attempted only once for any given course.
- Students currently enrolled in the course they wish to test out of must test or drop the course prior to the census date of the enrolled semester.
- Passing scores and exit competencies are based on learning outcomes of the course and are determined by faculty in the appropriate academic department.

Please review your program's requirements at https://www.collin.edu/academics/PLA_department_contacts.html.

CREDIT FOR PRIOR LEARNING THROUGH LINKED CONTINUING EDUCATION COURSES

Continuing Education (CE) students have an opportunity to have academic credit awarded for completing certain non-credit Collin College courses. Collin College CE courses that are offered in a linked format with a corresponding credit section of the same course may be eligible for credit to be awarded. Students completing an eligible CE course (linked) are held to the same rigorous standards of learning as credit students. The requirements to receive college credit are:

1. Students must be admitted to Collin College, meet the requirements of their declared credit-bearing program, and have completed three semester credit hours at Collin College before credit is awarded on the student's transcript. (Developmental Education courses do not count toward the three-credit hour requirement); and
2. Students must have successfully completed the same end-of-course final assessment(s) as the students completing the credit course. The minimum grade required for credit eligibility is determined by the credit department offering the linked course.

A minimum of 25% of the semester credit hours required for a degree or certificate must be earned through the credit program at Collin College. A non-refundable fee will be assessed for each course that is transcribed. Students should consult with the credit department over the linked courses for specific information regarding their program.

GRADUATION

Collin College offers Bachelor of Science in Nursing (BSN), Bachelor of Applied Science (BAS), Bachelor of Applied Technology (BAT), Associate of Arts (AA), Associate of Arts in Teaching (AAT), Associate of Science (AS), and Associate of Applied Science (AAS) degrees and certificate programs. Students who plan to graduate from Collin College should request a degree plan prior to the completion of 30 credit hours. Students must be currently admitted to Collin College to request a degree plan.

A student who completes specific course requirements for a degree or certificate with a minimum cumulative grade point average (GPA) of 2.0 and who completed a minimum of 25 percent of the award coursework at Collin College is a candidate for graduation. Non-traditional (e.g. Credit granted by Prior Learning Assessment, AP, CLEP, IB Credit, etc.) and developmental course credit do not meet this residency requirement. Candidates for an associate degree should apply for graduation at the beginning of the semester of degree completion. Any student who entered Collin College prior to the Fall 2008 semester and had transfer coursework applied to their transcript will have those transfer course grade points included in his or her Collin College GPA.

Degree Honors

Baccalaureate degree and associate degree honors will be awarded to students with the following cumulative GPA at Collin College:

4.0 Summa cum laude

3.75 - 3.99 Magna cum laude
3.5 - 3.74 Cum laude

Honors are calculated using all Collin College college-level coursework (and transcribed transfer coursework prior to Fall 2008). Grades earned in Developmental Education (DE) courses are not included.

Graduation Ceremonies

Graduation ceremonies are held twice a year. Students who complete their degree requirements in the Fall semester will attend the graduation ceremony in

December. Students who complete their degree requirements in Maymester or during the Summer terms will also be invited to participate in the Fall graduation ceremony in December. The Spring ceremony will be held for students who complete their degree requirements in the Wintermester and Spring terms. Students participating in graduation ceremonies must purchase regalia (i.e., cap and gown) from the Collin College bookstore.

For more information, contact the Graduation Office at graduation@collin.edu.

LEARNING OPPORTUNITIES

Collin College offers unique types of learning opportunities for students.

ACADEMIC PROGRAMS

SMART PLANNING FOR A DEGREE PROGRAM OR AREA OF STUDY

Collin College offers two types of educational programs:

- a) Transfer programs (AA, AS, AAT) are designed to prepare a student to transfer to bachelor's degree programs at a university to earn a traditional four-year degree in a variety of academic disciplines. Along these lines, students can complete the Core Curriculum certificate (by completing the 42 SCH core), a Field of Study, or begin coursework for a pre-professional program, or;
- b) Workforce programs (AAS, BAS, BAT, BSN) are designed to prepare students to enter the workforce upon graduation. Multiple pathways are offered that result in students earning occupational skills awards, certificates, Associate of Applied Science degrees, or applied baccalaureate degrees.

Choose A Program and Award

If you need help selecting a program that matches your skills and personality, go to Collin College's Career Services for help identifying your career goals. To obtain workforce details (such as projected earned wages) for programs offered at Collin College and other Texas schools, explore [Career Coach](#) and the [Texas CREWS website](#).

Before you register, choose an area of study or a degree/certificate. It is important to establish a degree plan, outlining all of the courses needed and the sequence as well as the semester in which the courses will be taken. Work with a Collin College Academic Advisor to complete the online "Change of Major" request form. The degree plan will help you make the right decisions so that you avoid taking courses that do not apply to your degree or certificate.

If you are planning to earn a 4-year baccalaureate degree, choose the 4-year college(s) you want to attend and select a baccalaureate degree as soon as possible. It is important to consider the specific degree requirements of the colleges where you want to transfer. Make these choices early in the planning process; ideally, when you first start at Collin College. If uncertain about a transfer institution, try picking one or two top choices. Work with a Collin

College Academic Advisor to determine which courses from Collin College will apply to the transfer institution.

Stay on Track

Run your personalized Degree Audit through CougarCompass every semester before registering. The CougarCompass Degree Audit report shows which requirements for your degree/program you've completed, and which ones you still need to complete. It also gives lists of courses you can use to complete specific core, elective and program requirements. Meeting with a Collin College Academic Advisor helps to ensure that you take only the courses you need. This can save your time and money.

Choosing a Plan Year

Students who plan to transfer to a college or university have a choice to make regarding the requirements for graduation. Specifically, they may choose to graduate in accordance with the program requirements that are in effect during one of their terms of enrollment. If a degree or certificate is terminated during their enrollment, they will have three years in which to complete the terminated program under the old requirements. They should consult with a Collin College academic advisor to learn about all the requirements and limitations that may apply. Students are advised to keep a copy of the program requirements and transfer guide(s) in effect during their enrollment at Collin College. Students should also keep their course syllabi to assist with transfer.

LEARNING TO LEARN

EDUC 1300 (also offered as EDUC 1100) Learning Framework is a college credit course that examines learning based on research and the theory of learning psychology. This course is available for all students who want to enrich their understanding of how to learn, enhance their study skills, and explore their own strengths and weaknesses as learners in order to develop effective personal learning strategies to increase their likely success in other college courses. For more information, see EDUC 1300 (or EDUC 1100) in the course description section.

APPRENTICESHIPS

Registered Apprenticeships Programs

Earn nationally recognized credentials while earning competitive wages in your chosen field. Registered apprenticeship programs combine paid on-the-job training under the supervision of experienced journey workers with related classroom instruction while receiving progressive pay increases. Master highly marketable skills while training for highly skilled, high-demand occupations. Apprentices

are employed by a partner and enrolled as credit students at Collin College. For more information about Registered Apprenticeship Programs or Apprenticeships, contact: apprenticeships@collin.edu.

ADVANCED STUDY OPPORTUNITIES

Advanced Study in Mathematics and Natural Sciences

The Center for Advanced Study in Mathematics and Natural Sciences (CASMNS) provides speakers, research opportunities for selected students, and advanced study opportunities in biology, chemistry, geology, mathematics, and physics.

Students desiring CASMNS opportunities should speak with a CASMNS faculty member during CASMNS orientation to schedule an interview, and if appropriate, the student will be assigned a supporting instructor.

Honors Coursework

The Honors Institute at Collin College provides a student with a challenging learning experience designed for students with advanced academic skills and a commitment to learning. Honors sections are designated as such in the registration schedule. Enrollment in and completion of an Honors course will be recorded on the student's transcript and may qualify the student for honors scholarships. Interested students should visit the Honors Institute webpage for information on eligibility to enroll in Honors courses: <https://www.collin.edu/academics/honors/>

PRE-PROFESSIONAL STUDIES FOR ACADEMIC TRANSFER STUDENTS

Professional schools, such as architecture, business, chiropractic, dental, engineering, law, medicine, pharmacy, and veterinary medicine require varying amounts of undergraduate preparation. Many of the required courses at the freshman and sophomore levels are offered at Collin College. It is the responsibility of students to know the exact requirements for admission to the specific professional school to which they are applying.

Every Texas public baccalaureate includes the 42-credit core curriculum as part of its degree requirements. The state of Texas guarantees that any Texas public institution will accept core credits from any other Texas public institution and that these core credits will apply toward a baccalaureate degree. Completing the core curriculum at Collin College will save a student money because the tuition per credit hour is lower than at any public four-year institution.

For additional information and specific Texas and out-of-state requirements, consult a Collin College academic advisor.

Pre-Architecture

Collin College offers the general education courses commonly required for students entering a baccalaureate degree program leading to careers in architecture, landscape architecture, building construction, and urban and regional planning.

Pre-Health Studies

Pre-Health studies include areas such as:

- Pre-Chiropractic, Pre-Clinical Lab Sciences,
- Pre-Dental
- Pre-Medicine
- Pre-Pharmacy
- Pre-Physician's Assistant
- Pre-Veterinary Medicine

Collin College offers the courses that are most commonly recommended for the first two years of Pre-Chiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine programs at most colleges and universities. These courses provide a basic foundation in medical science and help establish basic clinical reasoning and clinical skills. Most English, mathematics and science courses have prerequisite requirements.

Pre-Law

An applicant for admission to a school of law must have received, or have completed, all requirements for a baccalaureate degree from a college or university of approved standing prior to beginning work in a school of law. Future law school students should complete the core curriculum and take courses that emphasize written and oral skills, research into problems facing society, logical reasoning, and business practices.

For this occupation, students should consider courses in the following disciplines:

- Accounting
- Humanities
- Business
- Philosophy
- Economics
- Psychology
- English
- Sociology
- History
- Speech

Course selections should always be discussed with a Collin College academic advisor to ensure that students take the correct courses for their particular pre-law baccalaureate program at their intended transfer institution.

Pre-law students are encouraged to take the Law School Admission Test (LSAT) during the semester prior to completing the baccalaureate degree.

CONTINUING EDUCATION (CE) OPPORTUNITIES

Quality Learning Opportunities

Collin College's Continuing Education (CE) is open to the community and provides a tuition rate, specific for each course. CE offerings vary from semester to semester in order to meet local training demands and provide seasonal and current event offerings. New classes start weekly, with course durations ranging from several hours to several months. The most current information is available on Collin College's website at www.collin.edu/ce/.

Collin College's CE is the leading career skills training institution for adults who are seeking to build new and refine current skills. More than 70 industry-recognized certificate series and certification-preparation training programs are offered in the administrative, creative, education, finance, health care, information technology, logistics, management, public safety, service, and veterinary medicine career fields.

What is the difference between a credit course and a CE course?

- Credit courses are generally taken as part of a degree program and provide college credits.
- Non-credit (CE) courses provide a purposeful and systematic process of acquiring and recording lifetime learning.
- In some circumstances, students may leverage CE courses as a pathway to credit programs through Collin College's Prior Learning Assessment.
- Successful completion of non-credit courses is recorded as Continuing Education Units (CEUs).

Why would a student want to take CE courses?

- Students take CE courses to increase knowledge and skills, either for improved job performance or personal enrichment.
- Students earn Continuing Education Units (CEUs,) not traditional college credits. CE students may obtain a Continuing Education transcript which provides a record of completed CE courses.

What are linked courses?

- Linked courses offer non-credit students the opportunity to enroll in credit classes, sharing the same learning environment with credit students. Limited seats are available for CE students in linked courses.

- Offered in areas as varied as computer technology, dance, real estate and health care, these courses provide college credit for credit students and continuing education units (CEUs) for continuing education students.
- Continuing Education students pay the same tuition as in county credit students. Credit students pay the academic course tuition rate based residency status.
- CE students complete a quick admission process and space is limited for select Linked Courses. For a current list of linked courses, go to www.collin.edu/ce/classes/linked.html.

What are Continuing Education Units (CEUs)?

- CEUs are recognized nationally to record satisfactory completion of certain approved occupationally related programs. Courses are offered at a variety of locations depending on the types of courses and availability of facilities.
- One (1) CEU is awarded for each 10 contact hours of instruction included in a specified CE program or activity. Successful completion is attendance-based, unless otherwise noted with "Passed Competencies" under "CEUs Earned." Ninety (90) percent attendance is required for successful completion for most courses, but students are encouraged to review the course syllabus for each class to determine specific attendance requirements.
- For more information and CE transcript requests, visit <http://www.collin.edu/ce/ce-transcripts.html>.

How can I get more information about the contents of a course?

- The CE Syllabus Depot has expanded information for the courses offered. The CE Syllabus Depot is located on Collin College's website at <http://faculty.collin.edu/cesyllabus/>.
- CE Health Science course information can be found at <https://www.collin.edu/ce/healthsciences/courses.html>.

Are there any prerequisites for Continuing Education courses?

- Many courses specify prerequisite knowledge. These prerequisites are stated to ensure students have the prior knowledge and skills required to

get the most out of and be successful in the course.

- It is recommended students take the time to talk to an advisor or program personnel for the course area. For more information, go to www.collin.edu/ce/.

How do I register for a CE course?

- Most CE courses are open enrollment. Students choose the course(s), register, and pay for the class(es).
- Registration is available online, over the phone at 972.985.3711, or at any of Collin College's main campuses.
- For many CE healthcare courses, there is a separate application that must be completed and submitted with supporting documents. For more information, go to www.collin.edu/ce/healthsciences/index.html.

Will students receive a certificate upon CE course completion?

- CE does not provide certificates for individual courses. Certificates are only awarded for completion of a Certificate Series of courses.
- However, students may request an official CE transcript. Continuing Education Units (CEUs) are awarded for successful course completion, and will appear on an official CE transcript.

Locations of CE Classes

- The majority of CE classes are offered at the Courtyard Center (CYC) in Plano, with a select number of courses scheduled at other Collin College campus locations, including many online synchronous options.
- For a list of Collin College campus locations and maps, go to www.collin.edu/campuses/index.html.

For more information, call 972.985.3750.

AREAS OF STUDY - GENERAL STUDIES ELECTIVES

Collin College provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities, and to ensure enrollment in appropriate courses, students should verify course transferability and degree applicability with a Collin College academic advisor and/or the college or university that they plan to attend.

To earn an associate degree, complete the 42 credit hour [General Education Core](#), and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements.

Check with your transfer institution before registering for general studies electives to make sure your courses will be degree applicable to your bachelor's degree at the transfer institution.

ACCOUNTING

Accounting students who plan to major in Accounting when they transfer to a four-year institution should take the Business Field of Study at Collin College and complete the 42 credit hour [General Education Core](#) required to earn an Associates of Arts (AA) degree. Before you register for general studies electives at Collin College, speak with an advisor to determine if courses will transfer to the desired program and institution.

See [Business Field of Study](#)

AGRICULTURE

Today, more than ever, the study of Agriculture is reaching a critical level. As farmland decreases and the population increases, the need for a greater number of Agricultural specialists will continue to grow. By the year 2050, the world population will require a sustainable, innovative approach to growing more food in a smaller footprint.

Agriculture coursework and a general Associate of Science degree from Collin College will prepare you for university studies in an Agriculture-related field. Collin College offers a personalized, high quality educational experience, with an excellent instructional staff, and an innovative approach to developing new methods for raising crops and livestock.

Careers in Agriculture include farm and ranch management, controlled environment agriculture, animal husbandry, banking and finance, real estate, commodities broker, sales and marketing of equipment and pharmaceuticals, the United States Department of Agriculture, extension education, and agricultural education.

Recommended Electives:

AGRI	1419	Introduction to Animal Science
AGRI	2317	Introduction to Agricultural Economics

Department Website:

<http://www.collin.edu/departments/agriculture/>

AIR FORCE AND ARMY ROTC

Collin College students are given the opportunity to participate in the Air Force or Army ROTC program as crosstown students at the **University of North Texas in Denton, Texas**.

Students are required to attend an academic class, leadership laboratory and physical training at the University of North Texas once a week during the Fall and Spring academic semesters.

The ROTC mission is to develop quality leaders to serve our country as officers in the United States Air Force or Army. As a part of the program, you will prepare yourself to become an Air Force or Army Officer while completing your degree as a college student. Students may participate in four-year or three-year programs.

Students enroll in ROTC classes at the same time and in the same manner as other Collin College courses. Collin College's Business and Computer Systems Division administers the offering of ROTC courses for Collin College; students register and pay via Collin College in accordance with published payment deadlines.

Department Website:

www.afrotc.unt.edu, or
www.armyrotc.unt.edu

AMERICAN SIGN LANGUAGE

Deaf Education is a specialized education field that opens up learning for students who are deaf or hard of hearing. Studying American Sign Language (ASL) at Collin College will prepare you to pursue a career or degree in Deaf Education or Deaf Studies at a four-year college.

Recommended Electives

SGNL	1401	Beginning American Sign Language I
SGNL	1402	Beginning American Sign Language II
SGNL	2301	Intermediate American Sign Language I
SGNL	2302	Intermediate American Sign Language II
SLNG	1211	Fingerspelling and Numbers ¹
SLNG	1347	Deaf Culture

EDUC 1301	Introduction to the Teaching Profession ²
EDUC 2301	Introduction to Special Populations ²

1. Recommended for students pursuing degrees in Deaf Studies.
2. Recommended for students pursuing degrees in Deaf Education.

See the workforce [Interpreter Training Program \(ITP\)](#)

Department Website:

www.collin.edu/departments/asliep/

ANTHROPOLOGY

What defines being human? Why are there variations and differences among different groups of humans? Why does my social or cultural group react in a certain way to other groups' actions? Why does it make sense for other groups to behave in certain ways when it would never occur to me to do the same thing?

Anthropology seeks to answer these questions and others so we may better understand human societies and the complexity of our roles in the world. Collin College anthropology coursework will provide you with a foundation in the discipline and will serve you well as you seek to understand the world.

Recommended Electives

ANTH 2301	Physical Anthropology
ANTH 2302	Introduction to Archeology
ANTH 2346	General Anthropology
ANTH 2351	Cultural Anthropology
ANTH 2389	Academic Co-Op Anthropology
ANTH 2401	Physical Anthropology

ART

Collin College's Art program fosters a creative environment where you can learn the skills to become a successful artist. The Art program offers foundation-level courses in drawing, design, art appreciation and art history, as well as courses focused on traditional studio disciplines such as drawing, painting, watercolor, ceramics, sculpture, printmaking and metals.

Our spacious labs will provide you with access to professional-quality equipment, including printing presses, ceramic kilns, electric pottery wheels and a metal-casting foundry. Our gallery space, The Art Gallery, exposes students to the work of current professional artists and showcases student work in both open and juried student shows.

Our instructors are nationally recognized, practicing artists who are dedicated to helping you explore, research and practice the visual arts.

Recommended Electives

ARTS 1301	Art Appreciation
ARTS 1303	Art History I (Prehistoric to the 14 th Century)
ARTS 1304	Art History II (14 th Century to the present)
ARTS 1311	Design I (2-dimensional)
ARTS 1312	Design II (3-dimensional)
ARTS 1316	Drawing I
ARTS 1317	Drawing II
ARTS 2311	Design III
ARTS 2316	Painting I
ARTS 2317	Painting II
ARTS 2323	Life Drawing
ARTS 2326	Sculpture
ARTS 2333	Printmaking I
ARTS 2341	Metals
ARTS 2346	Ceramics I
ARTS 2347	Ceramics II
ARTS 2348	Digital Media
ARTS 2366	Watercolor

See [Fine Arts Field of Study Certificates](#):

- General Studies Track
- Studio Track

Also see [Photography area of study](#)

Department Website:

<https://www.collin.edu/departments/art/index.html>

BIOLOGY

Today, more than ever, biology is critical to human life and the future of the planet. Fast paced developments in medicine, genetics and environmental issues can be bewildering without a basic understanding of biology.

The Biology Department at Collin College offers students a broad introduction to modern biological sciences, with coursework emphasizing the molecular through the ecosystem level of organization. With a focus on current research, students will receive an education that will allow them to pursue a variety of academic and career opportunities.

Whether interested in a B.S. in Biology, teacher certification, allied health sciences, or a professional program, Collin College offers students a personalized, high quality educational experience. This includes an excellent instructional staff, computer-aided instruction, and a state-of-the-art laboratory facility.

Students taking courses in Biology at Collin College have the opportunity to specialize in areas of their particular interest. These include:

- Cell & Molecular – BIOL 1406, 1408, 1414, 1415, 2416
- Organismal & Environmental – BIOL 1407, 1409, 2406

- Health Sciences – BIOL 2401, 2402, 2404
- Microbiology – BIOL 2420, 2421

Recommended Electives

BIOL	1322	Nutrition and Diet Therapy
BIOL	2389	Academic Co-op Biology
BIOL	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
BIOL	2406	Environmental Biology
BIOL	2416	Genetics
BIOL	2421	Microbiology for Science Majors
CHEM	1411	General Chemistry I
CHEM	1412	General Chemistry II
CHEM	2423	Organic Chemistry I
CHEM	2425	Organic Chemistry II
HITT	1305	Medical Terminology I
MATH	1342	Elementary Statistical Methods
PHYS	1401	College Physics I
PHYS	1402	College Physics II
PHYS	2425	University Physics I
PHYS	2426	University Physics II

BUSINESS

If you are interested in a career in business or plan to pursue a bachelor's degree in accounting, business administration, finance, international business, management or marketing, the business field of study (FOS) curriculum at Collin College is a great starting point.

See [Certificate – Business Field of Study](#) and [AA - Business Field of Study](#)

CHEMISTRY

Earn an Associate of Science degree with chemistry coursework and lay the academic foundation for further studies in the sciences. Courses include general chemistry and organic chemistry, as well as an introduction to chemistry designed for students who are novices in the science disciplines.

Solving problems in chemistry requires creativity and curiosity, as well as logic and reasoning. An excellent instructional staff, stocked laboratory facilities and current scientific literature make chemistry courses at Collin College a personalized, high quality educational experience.

Recommended Electives

CHEM	2389	Academic Co-op Chemistry
CHEM	2423	Organic Chemistry I
CHEM	2425	Organic Chemistry II
MATH	2320	Differential Equations
MATH	2415	Calculus III
PHYS	2425	University Physics I
PHYS	2426	University Physics II

Department Website:

<http://www.collin.edu/departments/chemistry/index.html>

COMMUNICATION

Learn how to communicate effectively with an audience, in small groups, or one-on-one with a certificate from Collin College's Communication Field of Study (FOS). Whether you hope to pursue a degree in a communication, embark on a career that requires strong communication skills, or want to develop and maintain strong relationships personally and professionally, courses in Collin College's Communication FOS can provide you with a great foundation.

See [Certificate – Communications Field of Study](#)

COMPUTER SCIENCE

The mission of the Computer Science Field of Study Certificate at Collin College is to provide an excellent foundation in programming for students who plan to transfer to a four-year college or university to major in computer science.

Computers are a part of every aspect of modern life. An education in computer science can provide the training necessary to invent new technologies and/or improve current technologies. There is a constant, high demand for talented computer science graduates. If you like solving problems and have a talent for mathematics and logical thinking, a degree in computer science could be the start of a rewarding career.

Collin College's computer science courses will prepare you for a bachelor's degree in computer science or computer software engineering. Learn the fundamentals of programming and make the future your own.

See [Certificate – Computer Science and Information Technology Field of Study](#)

CRIMINAL JUSTICE

The Associate of Arts – Criminal Justice Field of Study program is focused on preparing graduates for a continued educational career towards a baccalaureate after completing the program at Collin College. Upon completion of the program, students are expected to have enhanced critical thinking, written, interpersonal and oral communication skills. As such, courses are designed to provide students an introduction to the criminal justice system, key concepts, practices, and criminal justice policy via critical analysis. The educational and professional skills students learn within the criminal justice program are expected to prepare them for the academic rigor of continued education and help them excel within their careers.

Students can also earn a Field of Study Certificate in Criminal Justice to build a solid foundation of criminal justice knowledge.

Recommended Electives

CRIJ	1307	Crime in America
CRIJ	1313	Juvenile Justice System
CRIJ	2314	Criminal Investigation
CRIJ	2323	Legal Aspects of Law Enforcement

See [Certificate – Criminal Justice Field of Study](#) and [AA – Criminal Justice Field of Study](#)

DANCE

Known for excellence in dance education, performance and choreography, Collin College's Dance Department has a reputation for preparing students for prestigious university dance programs. As a student at Collin College, you will have the opportunity to study multiple genres of dance technique (ballet, modern, jazz, tap and ballroom), as well as courses in performance, improvisation, choreography and dance appreciation. Through studying the art of dance, you will develop self-discipline, recognize diversity and expand your awareness of aesthetics.

Dance courses focus on movement fundamentals, technique, performance and choreography. The curriculum provides a comprehensive approach to learning dance by integrating the aesthetics, historical, critical, cultural and fundamental aspects of dance as an art form.

Students interested in additional dance experience may audition for the student dance company, Collin Dance Ensemble. The mission of the company is to produce contemporary dance works at the highest level of artistic excellence. The dance company attends and performs at the American College Dance Festival annually and has received the Gala Award ten times and performed at the National festival, as well. Dance auditions for the dance company are held prior to the Fall semester.

Recommended Electives

DANC	1110	Tap Dance
DANC	1112	Dance Practicum
DANC	1128	Ballroom and Social Dance
DANC	1151	Freshman Dance Performance
DANC	1201	Dance Composition - Improvisation
DANC	1241	Beginning Ballet
DANC	1245	Beginning Modern Dance
DANC	1247	Beginning Jazz Dance
DANC	1301	Dance Composition - Choreography
DANC	1305	World Dance
DANC	2151	Sophomore Dance Performance
DANC	2241	Intermediate Ballet
DANC	2245	Intermediate Modern Dance
DANC	2247	Intermediate Jazz Dance
DANC	2303	Dance Appreciation
DANC	2389	Academic Co-op Dance

Department Website:

www.collin.edu/departments/dance/

ECONOMICS

Economics is often referred to as the science of decision-making. Therefore, the field of Economics studies how human beings make choices in life under conditions of scarcity. The unlimited desires of human beings give rise to resource limitations. As a result, scarcity conditions provide incentives to human beings to make choices that may lead to reductions in wasteful behavior and lead to efficient outcomes. Economics analyzes individual decision making of consumers and households as well as firms. It researches the behavior of the economy as a whole and studies economic phenomena such as economic growth, inflation, unemployment, international trade, national debt, and national savings among others. Economics explores moral, political, and economic philosophies and theories in order to find suitable methods to incentivize human beings to become better decision-makers under conditions of scarcity. Economics students will learn marketable analytical and business skills that will benefit them in a wide variety of careers.

See [Certificate – Economics Field of Study: Bachelor of Science Track](#)

EDUCATION

Take the first steps toward becoming a teacher with an Associate of Arts in Teaching (AAT) degree from Collin College.

Collin College offers degree plans with three different specializations: early childhood through Grade 6, middle grades (grades 4-8) and secondary (grades 6-12, 7-12 or 8-12, depending on teaching content area). Specializations will prepare students for transfer to a baccalaureate program that leads to initial Texas teacher certification.

Students seeking all-level certifications (early childhood through Grade 12) like special education, theater, and art, can transfer EDUC 1301 and EDUC 2301 to baccalaureate institutions. Students should check with transfer advisors for other course requirements.

Students who complete the AAT will also complete 32 observation hours in a public school classroom.

Some TECA courses may be transferable in addition to the AAT. Students should contact their intended teacher education program for detailed information prior to registering. Contact names and phone numbers are available from a Collin College academic advisor or go to <http://www.collin.edu/transeru/index.html>.

EDUC 1301 and EDUC 2301 are offered in eight-week, sixteen-week, and weekend express formats. Courses are offered face-to-face and online. EDUC 1301 is a pre-requisite for EDUC 2301.

See [Associate of Arts in Teaching \(AAT\)](#) and the workforce [Child Development \(AAS\) program](#).

ENGINEERING

Build a foundation in the mathematics and sciences which are the basis of all engineering. Collin College's engineering field of study (FOS) programs are great preparation for a Bachelor of Science program in several disciplines within the school of engineering at a college or university.

Collin College offers three engineering tracks: civil engineering, electrical engineering and mechanical engineering. While they share much of the foundational material, each discipline has its own specialty. Explore the disciplines below and determine which suits your goals best.

Department Website:

<https://www.collin.edu/department/engineering/>

See [AS – Civil Engineering Field of Study](#)
[AS – Electrical Engineering Field of Study](#)
[AS – Mechanical Engineering Field of Study](#)
[Certificate – Civil Engineering Field of Study](#)
[Certificate – Electrical Engineering Field of Study](#)
[Certificate – Mechanical Engineering Field of Study](#)

ENGLISH

From the development of critical reading, thinking, and writing skills to studies of genre-specific writing like novels, poetry, short stories, films, graphic texts, and essays, Collin College's English courses offer choices for every student.

Composition and rhetoric courses, ENGL 1301 and ENGL 1302, focus on writing as a process, requiring planning, analysis, and research, which allows students to express opinions about the material clearly and with conviction. Students can take their writing a step further with technical writing, ENGL 2311, and electives in creative writing.

Sophomore-level courses include surveys in British, American, and World Literatures as well as Forms of Literature courses, which include the study of poetry, drama, short stories, novels, graphic texts, and/or film.

Writing Centers are available on each campus to provide students with professional consultations in writing and revising assignments.

Recommended Electives

ENGL 1301 Composition I

ENGL 1302 Composition II
 ENGL 2307 Creative Writing I
 ENGL 2311 Technical and Business Writing
 ENGL 2322 British Literature I
 ENGL 2323 British Literature II
 ENGL 2327 American Literature I
 ENGL 2328 American Literature II
 ENGL 2332 World Literature I
 ENGL 2333 World Literature II
 ENGL 2341 Forms of Literature: Short Story, Novel, Poetry, and Drama

ENVIRONMENTAL SCIENCE

Gain a greater understanding of the world and our natural environment with environmental science courses at Collin College. Environmental science is a multidisciplinary field concerned with the interaction of processes that shape the environment, understanding the potential causes of environmental problems and exploring possible solutions to them.

Coursework in environmental science involves a number of disciplines, including the biological, chemical and physical sciences; occupational health and safety; engineering; economics; and law.

Recommended Electives

ENVR 1401 Environmental Science I
 ENVR 1402 Environmental Science II
 BIOL 1406 Biology for Science Majors I
 BIOL 1407 Biology for Science Majors II
 BIOL 2406 Environmental Biology
 CHEM 1411 General Chemistry I
 GEOL 1403 Physical Geology
 GEOL 1445 Oceanography
 GEOL 1447 Introduction to Meteorology
 MATH 1342 Elementary Statistical Methods
 MATH 2413 Calculus I
 PHYS 1401 College Physics I

FOREIGN LANGUAGES

The ability to communicate effectively is important in our increasingly interconnected world. Would you like to learn Arabic, Chinese, French, German, Italian, Japanese, Russian or Spanish? Collin College offers foreign language electives in each.

Beginning and intermediate classes in foreign languages will provide you with an essential language background for advanced study of the language. Whether you are just starting out in a new language or have some prior education in the language, Collin College has great foreign language courses to sharpen your skills.

Arabic

ARAB 1411 Beginning Arabic I

ARAB 1412 Beginning Arabic II

Chinese

CHIN 1411 Beginning Chinese I
 CHIN 1412 Beginning Chinese II
 CHIN 2311 Intermediate Chinese I
 CHIN 2312 Intermediate Chinese II

French

FREN 1411 Beginning French I
 FREN 1412 Beginning French II
 FREN 2311 Intermediate French I
 FREN 2312 Intermediate French II

German

GERM 1411 Beginning German I
 GERM 1412 Beginning German II
 GERM 2311 Intermediate German I
 GERM 2312 Intermediate German II

Italian

ITAL 1411 Beginning Italian I
 ITAL 1412 Beginning Italian II

Japanese

JAPN 1411 Beginning Japanese I
 JAPN 1412 Beginning Japanese II
 JAPN 2311 Intermediate Japanese I
 JAPN 2312 Intermediate Japanese II

Russian

RUSS 1411 Beginning Russian I
 RUSS 1412 Beginning Russian II
 RUSS 2311 Intermediate Russian I
 RUSS 2312 Intermediate Russian II

Spanish

SPAN 1411 Beginning Spanish I
 SPAN 1412 Beginning Spanish II
 SPAN 2311 Intermediate Spanish I
 SPAN 2312 Intermediate Spanish II
 SPAN 2313 Spanish for Native/Heritage Speakers I
 SPAN 2314 Spanish for Native/Heritage Speakers II

GEOGRAPHY

The world is a big place. Learn how natural processes and human interaction have affected the planet with coursework in geography at Collin College. Study the factors that make up the world around us, including physical changes in the land and how those changes create human movement across the planet.

Recommended Electives

GEOG 1301 Physical Geography
 GEOG 1302 Human Geography
 GEOG 1303 World Regional Geography

GEOLOGY

Learn about the physical processes that have shaped the earth over billions of years with coursework in geology. This coursework will provide you with a background for careers in natural resources, meteorology, energy, engineering, geophysics, environmental studies and education.

More than that, an Associate of Science degree with coursework in geology can prepare you for a Bachelor of Science degree at a university.

Recommended Electives

GEOL 1305 Environmental Science –
 Natural Disasters
 GEOL 1403 Physical Geology
 GEOL 1404 Historical Geology
 GEOL 1445 Oceanography
 GEOL 1447 Introduction to Meteorology
 BIOL 2406 Environmental Biology
 CHEM 1411 General Chemistry I
 CHEM 1412 General Chemistry II
 ENGL 2311 Technical and Business Writing
 ENVR 1401 Environmental Science I
 ENVR 1402 Environmental Science II
 MATH 1342 Elementary Statistical Methods
 MATH 2413 Calculus I
 MATH 2414 Calculus II
 PHYS 2425 University Physics I
 PHYS 2426 University Physics II

Department Website:

www.collin.edu/departments/geology/index.html

GOVERNMENT/POLITICAL SCIENCE

The mission of the Government Department at Collin College is to support students and the College's broader mission through excellence in undergraduate teaching and research. Through our focus on introductory coursework in the Department, we integrate the core fields of Political Science and Governance studies - American Politics, Comparative Politics, International Relations, and Public Law - to prepare them for successful careers in the discipline, including but not limited to law, journalism, public administration, non-profit leadership, campaign management, political consulting, and academia. To this end, the Department of Government seeks to build highly knowledgeable students who are able to utilize the key core skills of critical thinking, evidence-based argumentation, verbal and written communication skills, working productively with diverse groups. All of this is achieved by our focus on training students to be active, informed, and contributing citizens and residents.

Political Science and Government involves the study of interesting and important topics about citizenship,

government and politics. This includes analyzing the effects of citizens on government decision making, the responsibilities, powers and strength of government institutions, and the influence and behavior of elected officials and other civil servants. These topics are critical components of what political scientists know about American government and politics, state and local government, comparative government and politics, international relations, political behavior, political economy, political institutions, and political theory. Political scientists pay special attention to the design, implementation, and evaluation of laws and public policies that may affect people's well-being. In addition to this, political scientists analyze other components of governance beyond the institutions, including political parties, electoral systems, civil rights, constitutionalism, and political theory.

While students are allowed to take any course within the set of course offerings in a given semester, students are encouraged to complete the Political Science Field of Study to streamline the transfer of credit to any other public college or university in the State of Texas.

The Political Science Field of Study introduces the student to the structure of government institutions; the development and impact of constitutions; and contemporary issues affecting local, state, national, and international governments. The field also examines political systems, institutional development, as well as theoretical and direct applications of political behavior. As a field of study, it helps the student develop an understanding of how laws and public policy shape and interact with issues of political ideology, voting rights, gender, civil rights, and civil liberties. It further emphasizes the importance of civic engagement both inside and outside the classroom. By including MATH 1342, the student will learn how data is collected and understand the direct skills needed to statistically analyze various topics like public opinion, voting behavior, interstate conflict, and predicting judicial decisions. The study of Political Science and Government will allow the student to develop various marketable and transferable skills including critical thinking, leadership, and applied quantitative analysis that can be used in many career fields in the discipline. After successfully completing the Political Science Field of Study, the courses will be transferred and applied to the bachelor's degree in Political Science and Government at any public college or university in Texas as a block.

Recommended Electives

GOVT	2304	Introduction to Political Science
GOVT	2311	Mexican-American Politics
CRIJ	1301	Introduction to Criminal Justice
CRIJ	1306	Court Systems and Practices
CRIJ	1310	Fundamentals of Criminal Law
ECON	2301	Principles of Macroeconomics

ECON	2302	Principles of Microeconomics
MATH	1342	Elementary Statistical Methods
PHIL	2303	Introduction to Formal Logic
PHIL	2306	Introduction to Ethics
PHIL	2307	Introduction to Social and Political Philosophy
PSYC	2301	General Psychology
SOCI	2319	Minority Studies
SOCI	2306	Human Sexuality
X4XX		Foreign Language Sequence I
X4XX		Foreign Language Sequence II

Department Website:

<https://www.collin.edu/department/politicalscience/index.html>

See [Certificate – Political Science Field of Study](#)

HISTORY

History coursework offers foundational knowledge for students interested in completing an associate degree as well as students pursuing a bachelor's degree. The American History survey courses meet the state's requirement for six hours of American history. In addition to the survey courses, the History department also offers courses in Western Civilizations, Texas History, African American History, World Civilizations, and Mexican American History.

Recommended Electives

HIST	2301	Texas History
HIST	2311	Western Civilization I
HIST	2312	Western Civilization II
HIST	2321	World Civilizations I
HIST	2322	World Civilizations II
HIST	2327	Mexican-American History I
HIST	2328	Mexican-American History II
HIST	2381	African American History I
HIST	2382	African American History II
ECON	2301	Principles of Macroeconomics
ECON	2302	Principles of Microeconomics
PHIL	1301	Introduction to Philosophy
PHIL	2303	Introduction to Formal Logic
PSYC	2301	General Psychology
SOCI	1301	Introduction to Sociology
X4XX		Foreign Language Sequence I
X4XX		Foreign Language Sequence II

Department Website:

<https://www.collin.edu/department/history/index.html>

KINESIOLOGY

Kinesiology is the study of the mechanics of the human body. The degree prepares students by providing the scientific foundations necessary to successfully transfer and

pursue a science degree in the area of kinesiology at a four-year college/university. Kinesiology courses lay the groundwork for a career as a physical therapist, an athletic or personal trainer, health educator, coach or in sports management. They also allow you to learn the knowledge and physical skills for lifetime sports and wellness through the KINE activity and theory classes.

Athletic Training

Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute and chronic medical conditions involving impairment, functional limitations and disabilities. Athletic trainers function under a physician's direction and are employed in a variety of settings including: athletic facilities, schools, clinics, hospitals, physician's offices, sports venues and more.

Recommended Electives:

BIOL	1322	Nutrition and Diet Therapy
KINE	1304	Personal/Community Health
KINE	1306	First Aid
KINE	1338	Concepts of Physical Fitness
KINE	2356	Care and Prevention of Athletic Injuries

Exercise Science

In these courses, you will gain a greater understanding of the scientific principles needed for personal training, fitness leadership, teaching and coaching sports performance and to improve the functionality and quality of human life.

Recommended Electives:

KINE	(1100, 2100, 1106, 2106, 1129, 1131)	
KINE	1164	Introduction to Physical Fitness and Wellness
KINE	1301	Foundations of Kinesiology
KINE	1304	Personal / Community Health
KINE	1306	First Aid
KINE	1338	Concepts of Physical Fitness

Sports Management

"Sports Management" refers to the business and operations side of the sports industry. In college athletics or professional sports organizations, for example, sports management professionals may be found performing a wide variety of tasks, including marketing, advertising, ticket sales, ordering and maintaining equipment and supplies, public relations, team travel coordination and ensuring compliance with league rules.

Recommended Electives:

KINE	1301	Foundations of Kinesiology
KINE	1336	Introduction to Recreation and Sports Management

MATHEMATICS

Collin College's mathematics department offers the courses you need to prepare for an associate degree or for advanced math, science or engineering studies at a four-year college or university. From basic college algebra to advanced calculus, the Math Department provides the guidance you need, no matter your skill level.

Most courses include graphing calculator or computer use and lab components that emphasize applications of mathematical concepts. Collin College features a mathematics laboratory providing personal, computer and audio-visual tutorial assistance.

Recommended Electives

MATH	1314	College Algebra
MATH	1316	Plane Trigonometry
MATH	1342	Elementary Statistical Methods
MATH	2305	Discrete Mathematics
MATH	2318	Linear Algebra
MATH	2320	Differential Equations
MATH	2412	Pre-Calculus Math
MATH	2413	Calculus I
MATH	2414	Calculus II
MATH	2415	Calculus III
ENGL	2311	Technical and Business Writing
ENGL	23XX	Any Literature course
PHIL	2303	Introduction to Formal Logic

MUSIC

Collin College's Department of Music offers the courses you need to prepare for an associate degree or for advanced musical studies at a four-year college or university. Areas of concentration include instrumental performance (winds, brass, strings, percussion, piano, guitar, harp), vocal performance (including opera and commercial), and instrumental and vocal jazz. Courses for non-performance music majors are available for composers, jazz arrangers, songwriters, and conductors.

The college is also home to several music ensembles open to both non-majors and music majors. Ensembles includes instrumental jazz combos, big band, guitar, keyboard, opera, vocal jazz, acapella pop, wind ensemble, and string ensemble.

In addition to the applied lessons and ensemble, the curriculum offers the required music theory, ear training, keyboard skills, and music literature, that all music majors must complete during their freshman and sophomore years. All of the coursework culminates in a Field of Study Associate of Arts or the Field of Study Certificate.

The music faculty hold applied study and ensemble auditions as well as advising for music majors on the Monday before each long (Fall and Spring) semesters.

Music majors are required to audition for ensembles and applied lesson study. The Fine Arts office provides contact information for ensemble directors or applied lesson instructors. There is a mandatory music orientation available the Monday before each long (Fall and Spring) semesters.

Applied lesson study in music is comprised of weekly one-on-one meetings in addition to attending and performing on the weekly departmental series, "The Wednesday Noon Recitals". Ensemble rehearsals are held weekly and culminate in one or more performances including an evening performance towards the end of the semester. Other performance opportunities are also available and may be required.

Department Website:

<http://www.collin.edu/department/music/>

See [AA – Music Field of Study](#)

[Certificate – Music Field of Study](#)

Workforce [Commercial Music \(AAS\) Program](#)

PHILOSOPHY

Before there was the scientific method, there was philosophy. Literally the "love of wisdom," philosophy seeks to explain the world through examination. The study of philosophy is foundational if you are dedicated to the pursuit of knowledge.

When you study philosophy at Collin College, you will become acquainted with the main problems of philosophy, examining those problems from multiple perspectives, so that a greater truth can be determined. You will come away with a greater understanding of philosophical thinking and a better understanding of the people around you.

Recommended Electives

PHIL	1301	Introduction to Philosophy
PHIL	1304	Introduction to World Religions
PHIL	2303	Introduction to Formal Logic
PHIL	2306	Introduction to Ethics
PHIL	2307	Introduction to Social and Political Philosophy
PHIL	2321	Philosophy of Religion
ANTH	2351	Cultural Anthropology
ENGL	2322	British Literature I
ENGL	2323	British Literature II
ENGL	2332	World Literature I
ENGL	2333	World Literature II
GOVT	2304	Introduction to Political Science
HIST	2311	Western Civilization I
HIST	2312	Western Civilization II
	X4XX	Foreign Language Sequence I
	X4XX	Foreign Language Sequence II

PHOTOGRAPHY

If you enjoy creating photographs, why not take it to the next level of craftsmanship and concept? Collin College's Photography Program can help you elevate your photography skills, learn advanced skills, improve creative practices and gain a deeper knowledge of contemporary fine art photography.

Collin College's Photography Program offers an Associates of Arts, Photography Area of Study Degree with the goal to prepare students to create fine art portfolios and/or transfer to a bachelor's level Photography program at a 4-year college or university. This 2-year degree covers technical skills for digital photography, darkroom photography, studio lighting, and craft classes. Beyond the technical skills, students will learn how to refine their work with conceptual and storytelling attributes. The department's facility includes a digital lab, darkroom, 2-bay lighting studio, alternative process lab, book binding lab, and a large format digital printing lab. All studios are supplied with quality equipment corresponding to the industry standard of professional studios. Additionally, the department maintains equipment for students to check out, including digital cameras, film cameras and accessories. Furthermore, Collin College's Photography Department works closely with area universities to ensure courses retain equivalent curriculum for transferability. To assist in seamless transferability, Collin's Photography Program hosts a selection of transfer agreements with local universities. After two years, students will have created a fine art photography portfolio for exhibition and/or to transfer.

To earn an associate degree, complete the 42-credit hour General Education Core and 18 credit hours of general studies electives and the Associate of Arts (AA) or Associate of Science (AS) degree requirements. Check with your transfer institution before registering for general studies electives to make sure your courses will be degree applicable to your bachelor's degree at the transfer institution.

Recommended Electives

ARTS	1313	Foundations of Art
ARTS	2348	Digital Media
ARTS	2356	Photography I
ARTS	2357	Photography II
ARTS	1311	Design I
ARTS	1312	Design II (3-dimensional)

Department Website:

<http://www.collin.edu/department/photography/>

See workforce [Commercial Photography \(AAS\)](#)

PHYSICS

The science of physics seeks to understand the physical universe and deals with the behavior of matter and energy at their most fundamental levels. By observation, physicists search for the basic principles that explain natural phenomena.

Many physics courses are offered online or in hybrid formats. The courses that are part of the sequence for the AA or AS degree are also potentially offered in 14-week formats as student demand and instructor availability permit.

Recommended Electives

PHYS	1401	College Physics I
PHYS	1402	College Physics II
PHYS	1403	Stars and Galaxies
PHYS	1404	Solar System
PHYS	1405	Elementary Physics I - Conceptual Physics
PHYS	1410	Physics of Music and Sound
PHYS	1415	Physical Science I
PHYS	1417	Physical Science II
PHYS	2425	University Physics I
PHYS	2426	University Physics II
CHEM	1411	General Chemistry I
CHEM	1412	General Chemistry II
ENGL	2311	Technical and Business Writing
GEOL	1403	Physical Geology
GEOL	1404	Historical Geology
MATH	2318	Linear Algebra
MATH	2320	Differential Equations
MATH	2412	Pre-Calculus Math
MATH	2413	Calculus I
MATH	2414	Calculus II
MATH	2415	Calculus III

PSYCHOLOGY

Broaden your understanding of the human mind or lay the groundwork for a career in psychology with coursework at Collin College.

Collin College's psychology coursework features a variety of introductory courses exploring the principles of behavior and mental processes. Course offerings include general psychology, life-span psychology, human sexuality, psychology of personality and social psychology. These courses emphasize psychological theory and research, the historical context of the development of the field and the use of psychological concepts as a tool for better understanding what it means to be a human being.

An Associate of Arts degree with coursework in psychology serves as a foundation for continued studies in the discipline. Because most careers in psychology require an advanced degree, many students transfer to a college or university to complete the bachelor's degree and apply for admission to a graduate program in psychology.

Recommended Electives

EDUC	1300	Learning Framework
PSYC	2301	General Psychology
PSYC	2306	Human Sexuality
PSYC	2314	Life-Span Growth and Development
PSYC	2315	Psychology of Adjustment
PSYC	2316	Psychology of Personality
PSYC	2317	Statistical Methods in Psychology
PSYC	2319	Social Psychology
PSYC	2320	Abnormal Psychology
PSYC	2330	Biological Psychology
SOCI	1301	Introduction to Sociology
SOCI	1306	Social Problems
SOCI	2301	Marriage & the Family

See [Certificate – Psychology Field of Study](#)

SOCIOLOGY

Sociology examines how social factors affect both behavior and the potential consequences of that behavior. It seeks to uncover the existence of social patterns, explain how social patterns come to be and explore the consequences of such patterns for different individuals, groups and society at large. Sociology coursework at Collin College is designed to provide you with essential life skills and a deeper understanding of yourself and others. Critical thinking skills and a global perspective – attributes that will benefit you regardless of your major – are strongly emphasized.

Recommended Electives

SOCI	1301	Introduction to Sociology
SOCI	1306	Social Problems
SOCI	2301	Marriage & the Family
SOCI	2306	Human Sexuality
SOCI	2319	Minority Studies
SOCI	2340	Drug Use and Abuse

Department Website:

<https://www.collin.edu/department/sociology/>

See [Certificate – Sociology Field of Study](#)

THEATRE/DRAMA

Collin College Theatre's course work and productions are nationally recognized, as are its faculty, staff and guest artists. Alumni are working professionally in regional and Broadway theatres, television, film and other media – in successful careers as actors, directors, designers, stage managers, technicians, writers, producers, educators, and more.

While many alumni go on to complete BA and BFA degrees, others transfer to conservatories or go directly into the professions listed above. Still other students develop creative and communication skills which they apply to a wide range of career choices.

Theatre courses introduce students to the historical, theoretical and practical elements of theatre. Each year Collin College Theatre produces four mainstage productions – including musicals, dramas, comedies, and classical works, as well as other special student-directed events. These “living labs” give the students hands-on experiences through performance, shop work and crew assignments.

The Collin College Theatre faculty are all working professionals, and their combined specializations cover the performing skills of acting, directing, movement, and voice; as well as the technical theatre fields of scenic design, lighting design, costume and makeup design, sound design, and stage management.

Collin College's state-of-the-art theatre facility is comprised of three separate performance spaces, including the 350-seat John Anthony Theatre, the 120-seat Black Box Theatre and the intimate ALT Lab Theatre. The multi-million-dollar complex also houses a scenic and paint shop, a costume vault and construction shop, dressing rooms, and a theatre box office, in addition to numerous acting and directing classroom spaces.

Collin College Theatre encourages interdisciplinary studies. Students interested in musical theatre can enroll in courses such as MUSI 1183 Voice Class (singing), MUEN 1154 Musical Theatre Ensemble, DANC 1110 Tap Dance and DANC 1247 Beginning Jazz Dance. Fine Arts,

Communications and Video Production are a few of the disciplines that provide a wide range of opportunities for our theatre students and help them prepare for the careers of the future.

Students can earn a certificate of completion in one of three different Fields of Study: General, Performance, or Design/Technical. Please see specific information regarding Fields of Study in the Fields of Study section of the catalog.

Collin College Theatre – You can get anywhere from here!

Recommended Electives

DRAM	1120	Theater Practicum I
DRAM	1121	Theater Practicum II
DRAM	1310	Theater Appreciation
DRAM	1322	Stage Movement
DRAM	1330	Stagecraft I
DRAM	1341	Stage Makeup
DRAM	1342	Costume Technology
DRAM	1351	Acting I
DRAM	1352	Acting II
DRAM	2331	Stagecraft II
DRAM	2335	Theatre Design
DRAM	2336	Voice for the Actor
DRAM	2355	Script Analysis
DRAM	2361	History of Theater I
DRAM	2362	History of Theater II
DRAM	2366	Film Appreciation
DRAM	2389	Academic Co-op – Drama

Department Website:

<http://www.collin.edu/department/theatre/>

See [Certificate – Drama Field of Study: General Track](#)
[Certificate – Drama Field of Study: Performance Track](#)
[Certificate – Drama Field of Study: Design/Technical Track](#)

FIELD OF STUDY (FOS) CERTIFICATES

A Field of Study is a set of courses that will transfer and apply to a corresponding bachelor's level degree at a Texas college or university. Both the Field of Study and the Core Curriculum courses are transferrable for full academic credit to any public college or university in Texas. Students who complete the Field of Study block of courses will earn a certificate in that Field of Study.

FIELD OF STUDY (FOS) CERTIFICATES

For program information and descriptions, see Areas of Study section.

The recommended course sequences for the Field of Study (FOS) Certificates shown below only show those courses required to complete the indicated Field of Study certificate. Some courses required for a Field of Study certificate may have prerequisites that are not included in the course sequences because the prerequisite courses are not included in the block of courses guaranteed to transfer as the Field of Study curricula. In any semester students may take additional classes, such as core curriculum courses or electives, to complete an Associate of Arts or Associate of Science degree. (Please see the Associate of Arts (AA) General Studies and Associate of Arts with Field of Study Degrees and the Associate of Science (AS) General Studies and Associate of Science with Field of Study Degrees sections of the Catalog for specialized associate degrees that incorporate many Field of Study disciplines.)

Before registering for classes, students should always:

1. Consult with an academic advisor.
2. Verify if prerequisites are necessary for courses.
3. If needed, check with the department on availability of courses as some may be offered on a limited basis.
4. If planning to transfer, confirm requirements for the specific degree sought at the transfer institution.
5. Plan out your courses beyond one semester.

*In July 2020, the Texas Higher Education Coordinating Board (THECB) voted to further review the new Field of Study curricula that were scheduled to go into effect in Fall 2020. Collin College has five FOS Certificates that were affected by this action. The THECB action may limit the applicability toward the corresponding majors at state-supported colleges or universities. Students enrolled in one of these Field of Study certificates are encouraged to meet with an academic advisor and/or contact their transfer institution to make sure courses in the certificate will be degree applicable to their bachelor's degree at the transfer university.

BUSINESS

Program Option:

Certificate – Business Field of Study

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Business Field of Study

24 credit hours

FIRST YEAR

First Semester

BUSI	1301	Business Principles
<u>MATH</u>	<u>1324</u>	<u>Mathematics for Business and Social Sciences</u>

Second Semester

<u>ECON</u>	<u>2301</u>	<u>Principles of Macroeconomics</u>
DIRECTED ELECTIVE ¹		

SECOND YEAR

First Semester

ACCT	2301	Principles of Financial Accounting
ECON	2302	Principles of Microeconomics

Second Semester

ACCT	2302	Principles of Managerial Accounting
DIRECTED ELECTIVE ¹		

The Required General Education Core courses listed above satisfy the Social and Behavioral Sciences component, and the Mathematics component.

1. Directed Electives for the Business Administration Field of Study are chosen by each transfer university in Texas that offers a Bachelor's degree in Business Administration. For example:

Texas A&M University - Commerce requires BCIS 1305 and MATH 1325.

Texas Woman's University requires BUSI 1307 and MATH 1342.

University of North Texas requires BCIS 1305 and BUSI 2305.

University of Texas at Dallas requires BUSI 2301 and MATH 1325.

Please meet with a Collin College academic advisor to determine which courses would be best to take for completion of this program. If you plan to transfer, also check with your intended transfer college or university prior to beginning this program to verify course transferability.

COMMUNICATION ***Program Option:**

Certificate – Communications Field of Study

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificate after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Communications Field of Study

12 credit hours

FIRST YEAR**First Semester**

SPCH 1311 Introduction to Speech Communication
SPCH 1315 Public Speaking

Second Semester

SPCH 1318 Interpersonal Communication
SPCH 1321 Business and Professional Communication

COMPUTER SCIENCE ***Department Website:**

https://www.collin.edu/department/computerscience/computer_science.html

Program Option:

Certificate – Computer Science & Information Technology Field of Study

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificate after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Computer Science & Information Technology Field of Study

34 credit hours

FIRST YEAR**First Semester**

MATH 2413 Calculus I¹
COSC 1436 Programming Fundamentals I²

Second Semester

COSC 2325 Computer Organization³
COSC 1437 Programming Fundamentals II²
MATH 2414 Calculus II¹
MATH 2305 Discrete Mathematics

SECOND YEAR**First Semester**

COSC 2436 Programming Fundamentals III²
PHYS 2425 University Physics I¹

Second Semester

PHYS 2426 University Physics II¹

1. It is recommended that students complete the math sequence, physics sequence, and computer science sequence at the same institution to reduce the likelihood of potential gaps in the curriculum. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.
2. COSC 1436 and COSC 1437 are preparatory and sequential in nature; however, not all courses are required for the Computer Science major at all universities but may apply to general degree requirements.
 - a) COSC 1436 is not part of the Computer Science major requirements at The University of Texas at Austin, the University of Texas at Arlington, and Texas A&M University.
 - b) COSC 1437 is not part of the Computer Science major requirements at The University of Texas at Austin. Preparatory courses such as COSC 1436 and COSC 1437 will assist students who need additional background but do not apply toward the computer science major requirements.
3. COSC 2325 is not part of the Computer Science major requirements at The University of Texas at Austin, or Texas A&M University but may be applied to general degree requirements.

CRIMINAL JUSTICE**Program Option:**

Certificate – Criminal Justice Field of Study

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Criminal Justice Field of Study

21 credit hours

FIRST YEAR**First Semester**

CRIJ	1301	Introduction to Criminal Justice
CRIJ	1306	Court Systems and Practices
CRIJ	1310	Fundamentals of Criminal Law

Second Semester

CRIJ	2313	Correctional Systems and Practices
CRIJ	2328	Police Systems and Practices

DIRECTED ELECTIVE *

DIRECTED ELECTIVE *

*** Directed Electives for the Criminal Justice Field of Study are chosen by each transfer university in Texas that offers a Bachelor's degree in Criminal Justice. For example:*

Texas A&M University - Commerce requires CRIJ 1307 and CRIJ 2301.

Texas Woman's University requires CRIJ 1307 and CRIJ 2314. University of North Texas requires ENGL 2311 and SPCH 1311.

University of Texas at Dallas did not submit any courses at the time of this printing.

Please meet with a Collin College academic advisor to determine which courses would be best to take for completion of this program. If you plan to transfer, also check with your intended transfer college or university prior to beginning this program to verify course transferability.

DRAMA ***Program Options:****Certificate – Drama Field of Study: General Track****Certificate – Drama Field of Study: Performance Track****Certificate – Drama Field of Study: Design/Technical Track**

Effective January 25, 2024, these awards are no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared these intended programs/majors prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificates after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Drama Field of Study: General Track

22 credit hours

FIRST YEAR**First Semester**

DRAM	1330	Stagecraft I
DRAM	1351	Acting I
DRAM	1120	Theater Practicum I

Second Semester

DRAM	1341	Stage Makeup
DRAM	2355	Script Analysis
DRAM	1121	Theater Practicum II

SECOND YEAR**First Semester**

DRAM	2336	Voice for the Actor
DRAM	2120	Theater Practicum III

Second Semester

DRAM	1342	Costume Technology
DRAM	2121	Theater Practicum IV

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Drama Field of Study: Performance Track

22 credit hours

FIRST YEAR**First Semester**

DRAM	1330	Stagecraft I
DRAM	1351	Acting I
DRAM	1120	Theater Practicum I

Second Semester

DRAM	1322	Stage Movement
DRAM	2355	Script Analysis
DRAM	1121	Theater Practicum II

SECOND YEAR**First Semester**

DRAM	2336	Voice for the Actor
DRAM	2120	Theater Practicum III

Second Semester

DRAM	2121	Theater Practicum IV
DRAM	1352	Acting II

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

**Certificate – Drama Field of Study:
Design/Technical Track**

22 credit hours

FIRST YEAR

First Semester

DRAM 1330	Stagecraft I
DRAM 1351	Acting I
DRAM 1120	Theater Practicum I

Second Semester

DRAM 2331	Stagecraft II
DRAM 2355	Script Analysis
DRAM 1121	Theater Practicum II

SECOND YEAR

First Semester

DRAM 1342	Costume Technology
DRAM 2120	Theater Practicum III

Second Semester

DRAM 2335	Theater Design
DRAM 2121	Theater Practicum IV

ECONOMICS *

Program Option:

Certificate – Economics Field of Study: Bachelor of Science Track

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificate after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Economics Field of Study: Bachelor of Science Track

13 credit hours

FIRST YEAR

First Semester

ECON 2301	Principles of Macroeconomics
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Second Semester

ECON 2302	Principles of Microeconomics
MATH 2413	Calculus I ¹

SECOND YEAR

First Semester

BUSI 2305	Business Statistics ²
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1. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.
2. Students should consult with an academic advisor since course requires BCIS 1305 and MATH 1314 or 1324 as prerequisites that must be fulfilled in order to enroll.

ENGINEERING

Program Options:

Certificate – Civil Engineering Field of Study

Certificate – Electrical Engineering Field of Study

Certificate – Mechanical Engineering Field of Study

Effective January 25, 2024, these awards are no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared these intended programs/majors prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificates after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Prerequisites – Civil Engineering Field of Study

7 Credit Hours

MATH 1314	College Algebra (or equivalent/higher)
MATH 2412	Pre-Calculus Math (or equivalent/higher)

Certificate – Civil Engineering Field of Study

39 Credit Hours

FIRST YEAR

First Semester

ENGR 1304	Engineering Graphics
MATH 2413	Calculus I ¹

Second Semester

MATH 2414	Calculus II
PHYS 2425	University Physics I

SECOND YEAR**First Semester**

ENGR	2301	Engineering Mechanics - Statics
MATH	2415	Calculus III
PHYS	2426	University Physics II

Second Semester

CHEM	1409	General Chemistry for Engineering Majors
ENGR	2302	Engineering Mechanics - Dynamics
ENGR	2332	Mechanics of Materials
MATH	2320	Differential Equations

1. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Prerequisites – Electrical Engineering Field of Study

7 Credit Hours

MATH	1314	College Algebra (or equivalent/higher)
MATH	2412	Pre-Calculus Math (or equivalent/higher)

Certificate – Electrical Engineering Field of Study

31 Credit Hours

FIRST YEAR**First Semester**

COSC	1420	C Programming
MATH	2413	Calculus I ¹

Second Semester

MATH	2414	Calculus II
PHYS	2425	University Physics I

SECOND YEAR**First Semester**

MATH	2415	Calculus III
PHYS	2426	University Physics II

Second Semester

ENGR	2305	Electrical Circuits I
ENGR	2105	Electrical Circuits I Laboratory
MATH	2320	Differential Equations

1. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Prerequisites – Mechanical Engineering Field of Study

10 Credit Hours

MATH	1314	College Algebra (or equivalent/higher)
MATH	2320	Differential Equations prerequisite/concurrent
MATH	2412	Pre-Calculus Math (or equivalent/higher)

Certificate – Mechanical Engineering Field of Study

36 Credit Hours

FIRST YEAR**First Semester**

MATH	2413	Calculus I ¹
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Second Semester

MATH	2414	Calculus II
PHYS	2425	University Physics I

SECOND YEAR**First Semester**

ENGR	2301	Engineering Mechanics – Statics
MATH	2415	Calculus III
PHYS	2426	University Physics II

Second Semester

CHEM	1409	General Chemistry for Engineering Majors
ENGR	2302	Engineering Mechanics - Dynamics
ENGR	2305	Electrical Circuits I ²
ENGR	2332	Mechanics of Materials

1. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.
2. Course has prerequisite/corequisite of MATH 2320 that must be fulfilled in order to enroll.

FINE ARTS ***Program Options:**

Certificate – Fine Arts Field of Study: General Studies Track

Certificate – Fine Arts Field of Study: Studio Track

Effective January 25, 2024, these awards are no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared these intended programs/majors prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to

be offered by Collin College, but Collin College will no longer be able to award the Certificates after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Fine Arts Field of Study: General Studies Track

24 credit hours

FIRST YEAR

First Semester

ARTS 1303 Art History I (Prehistoric to the 14th Century)
ARTS 1311 Design I (2-Dimensional)

Second Semester

ARTS 1304 Art History II (14th Century to the Present)
ARTS 1312 Design II (3-Dimensional)
ARTS 1316 Drawing I

SECOND YEAR

First Semester

ARTS 2316 Painting I
ARTS 2348 Digital Media

Second Semester

ARTS 2326 Sculpture

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Fine Arts Field of Study: Studio Track

27 credit hours

FIRST YEAR

First Semester

ARTS 1303 Art History I (Prehistoric to the 14th Century)
ARTS 1311 Design I (2-Dimensional)

Second Semester

ARTS 1304 Art History II (14th Century to the Present)
ARTS 1312 Design II (3-Dimensional)
ARTS 1316 Drawing I

SECOND YEAR

First Semester

ARTS 1317 Drawing II
ARTS 2348 Digital Media

Second Semester

ARTS 2346 Ceramics I
ARTS 2323 Life Drawing

MUSIC

Program Option:

Certificate – Music Field of Study

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificate after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Music Field of Study

31 credit hours

FIRST YEAR

First Semester

MUSI 1311 Music Theory I
MUSI 1116 Sight Singing & Ear Training I
MUEN 1132 Keyboard Ensemble
MUAP 2269 Concentration Applied Music - Piano
MUSI 1307 Music Literature

Second Semester

MUSI 1312 Music Theory II
MUSI 1117 Sight Singing & Ear Training II
MUEN 1132 Keyboard Ensemble
MUAP 2269 Concentration Applied Music - Piano

SECOND YEAR

First Semester

MUSI 2311 Music Theory III
MUSI 2116 Sight Singing & Ear Training III
MUEN 1132 Keyboard Ensemble
MUAP 2269 Concentration Applied Music – Piano

Second Semester

MUSI 2312 Music Theory IV
MUSI 2117 Sight Singing & Ear Training IV
MUEN 1132 Keyboard Ensemble
MUAP 2269 Concentration Applied Music – Piano

Recommended Courses for Piano Proficiency

Keyboard (Piano) Competency

4 credit hours

MUSI	1181	Piano Class I
MUSI	1182	Piano Class II
MUSI	2181	Piano Class III
MUSI	2182	Piano Class IV

Baccalaureate Music programs require piano proficiency although the piano skills courses are not part of the guaranteed transfer block. Students are encouraged to take the keyboard competency courses in addition to completion of the Music Field of Study prior to transfer. Students may take a barrier exam to identify the need to take the courses.

POLITICAL SCIENCE

Program Option:

Certificate – Political Science Field of Study

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificate after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Political Science Field of Study

12 credit hours

FIRST YEAR

First Semester

GOVT	2305	Federal Government (Federal Constitution & Topics)
GOVT	2306	Texas Government (Texas Constitution & Topics)

Second Semester

GOVT	2304	Introduction to Political Science
MATH	1342	Elementary Statistical Methods

PSYCHOLOGY

Program Option:

Certificate – Psychology Field of Study

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificate after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Psychology Field of Study

18 credit hours

FIRST YEAR

First Semester

PSYC	2301	General Psychology
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Second Semester

PSYC	2314	Life-Span Growth and Development
PSYC	2319	Social Psychology

SECOND YEAR

First Semester

PSYC	2317	Statistical Methods in Psychology
PSYC	2320	Abnormal Psychology

Second Semester

PSYC	2330	Biological Psychology
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SOCIOLOGY

Program Option:

Certificate – Sociology Field of Study

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the Certificate after August 31, 2025. Please see a Collin College advisor if you have questions.

Below is a recommended course sequence that will allow a student to earn the certificate. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

Certificate – Sociology Field of Study

12 credit hours

FIRST YEAR

First Semester

SOCI 1301 Introduction to Sociology
SOCI 1306 Social Problems

Second Semester

SOCI 2301 Marriage & the Family
SOCI 2319 Minority Studies

ASSOCIATE OF ARTS (AA) GENERAL STUDIES AND ASSOCIATE OF ARTS WITH FIELD OF STUDY

The Associate of Arts degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities, and to ensure enrollment in appropriate courses, students should verify course transferability and degree applicability with a Collin College academic advisor and/or visit TransferU at: <http://www.collin.edu/transferu/index.html>.

There are two options to pursue for the Associate of Arts Degree (AA):

- Associate of Arts Degree (AA) – General Studies
- Associate of Arts Degree (AA) – Field of Study

ASSOCIATE OF ARTS DEGREES (AA) – GENERAL STUDIES

GENERAL STUDIES

Program Option: AA – General Studies

To earn an Associate of Arts (AA) degree with no field of study, complete the 42 credit hour General Education Core, 18 credit hours of general studies electives and any other Associate of Arts (AA) degree requirements. Check with your transfer institution before registering for general studies electives to make sure your courses will be degree applicable to your bachelor's degree at the transfer institution.

AA – General Studies

60 credit hours

FIRST YEAR

First Semester

<u>GEN ED</u>	Communication course
<u>GEN ED</u>	History course
<u>GEN ED</u>	Creative Arts course
<u>GEN ED</u>	Mathematics course
ELECTIVE	Elective ¹ (3 SCH)

Second Semester

<u>GEN ED</u>	Communication course
<u>GEN ED</u>	History course
<u>GEN ED</u>	Speech course
ELECTIVE	Elective ¹ (3 SCH)
<u>GEN ED</u>	Component area option²

SECOND YEAR

First Semester

<u>GEN ED</u>	Language, Philosophy & Culture course
<u>GEN ED</u>	Government course

<u>GEN ED</u>	Life and Physical Sciences course with lab
ELECTIVE	Elective ¹ (3 SCH)
ELECTIVE	Elective ¹ (3 SCH)

Second Semester

<u>GEN ED</u>	Government course
<u>GEN ED</u>	Social and Behavioral Sciences course
ELECTIVE	Elective ¹ (3 SCH)
ELECTIVE	Elective ¹ (3 SCH)
<u>GEN ED</u>	Life and Physical Sciences course with lab

1. For an AA Degree, a minimum of 18 credit hours of degree requirements and general studies electives must be completed. General studies electives may be drawn from any college-level credit course.

2. Any core course not already utilized to fulfill a component area, or EDUC 1100, EDUC 1300, KINE 1164, KINE 1304, KINE 1338 may fulfill the last hour of core needed. If student earns more than 42 core credit hours, the extra hours may be applied to degree requirements.

The underlined GEN ED courses note required core components for the AA degree. If no class is specified, student has option to choose from that component. Students should consult with an advisor on best options for their chosen field and what is required by their chosen transfer institution.

ASSOCIATE OF ARTS DEGREES (AA) – FIELD OF STUDY

BUSINESS

Program Option: AA - Business Field of Study

An Associate of Arts with a Business Field of Study requires 60 credit hours, including the 24 credit hours Business Field of Study and 36 credit hours of General Education Core. Check with your transfer institution before registering for general studies electives to make sure your courses will be degree-applicable to your bachelor's degree at the transfer institution.

AA - Business Field of Study

60 credit hours

FIRST YEAR

First Semester

BUSI	1301	Business Principles
ENGL	1301	Composition I

<u>HIST</u>	<u>1301</u>	<u>United States History I</u> (See American History options)
<u>MATH</u>	<u>1324</u>	<u>Mathematics for Business and Social Sciences</u>
<u>GEN ED</u>		<u>Creative Arts</u> course

Second Semester

<u>ECON</u>	<u>2301</u>	<u>Principles of Macroeconomics</u>
<u>ENGL</u>	<u>1302</u>	<u>Composition II</u> (See Communication options)
<u>HIST</u>	<u>1302</u>	<u>United States History II</u> (See American History options)
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

DIRECTED ELECTIVE ²**SECOND YEAR****First Semester**

<u>ACCT</u>	<u>2301</u>	<u>Principles of Financial Accounting</u>
<u>ECON</u>	<u>2302</u>	<u>Principles of Microeconomics</u>
<u>GOVT</u>	<u>2305</u>	<u>Federal Government (Federal constitution and topics)</u>
<u>GEN ED</u>		<u>Collin Options Area 2</u> course ¹
<u>GEN ED</u>		<u>Life and Physical Sciences</u> course

Second Semester

<u>ACCT</u>	<u>2302</u>	<u>Principles of Managerial Accounting</u>
<u>GOVT</u>	<u>2306</u>	<u>Texas Government (Texas constitution and topics)</u>
<u>GEN ED</u>		<u>Language, Philosophy & Culture</u> course
<u>GEN ED</u>		<u>Life and Physical Sciences</u> course

DIRECTED ELECTIVE ²

1. Select course with one credit hour to meet 60 credit hour degree requirement.
2. Directed Electives for the Business Administration Field of Study are chosen by each transfer university in Texas that offers a Bachelor's degree in Business Administration. For example:
 Texas A&M University - Commerce requires BCIS 1305 and MATH 1325
 Texas Woman's University requires BUSI 1307 and MATH 1342
 University of North Texas requires BCIS 1305 and BUSI 2305
 University of Texas at Dallas requires BUSI 2301 and MATH 1325

Please meet with a Collin College academic advisor to determine which courses would be best to take for completion of this program. If you plan to transfer, also check with your intended transfer college or university prior to beginning this program to verify course transferability.

CRIMINAL JUSTICE**Program Option:****AA – Criminal Justice Field of Study**

To earn an associate of arts degree with the Criminal Justice Field of Study, you must complete the 42 credit hour Core Curriculum and 18 credit hours of electives. A total of 15 semester credit hours of Criminal Justice courses are required and 6 credit hours of directed electives are chosen by the university that you intend to transfer to. Please work with an advisor to choose the appropriate directed electives to meet the requirements of the program you intend to enter.

AA – Criminal Justice Field of Study

60 credit hours

FIRST YEAR**First Semester**

<u>CRIJ</u>	<u>1301</u>	<u>Introduction to Criminal Justice</u>
<u>CRIJ</u>	<u>1306</u>	<u>Court Systems and Practices</u>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>HIST</u>	<u>1301</u>	<u>United States History I</u> (See American History options)
<u>GEN ED</u>		<u>Language, Philosophy & Culture</u> course

Second Semester

<u>CRIJ</u>	<u>1310</u>	<u>Fundamentals of Criminal Law</u>
<u>ENGL</u>	<u>1302</u>	<u>Composition II</u> (See Communications options)
<u>HIST</u>	<u>1302</u>	<u>United States History II</u> (See American History options)
<u>GEN ED</u>		<u>Mathematics</u> course
<u>GEN ED</u>		<u>Speech</u> course

SECOND YEAR**First Semester**

<u>CRIJ</u>	<u>2313</u>	<u>Correctional Systems and Practices</u>
<u>EDUC</u>	<u>1100</u>	<u>Learning Framework</u> (See Collin Options Area 2)
<u>GOVT</u>	<u>2305</u>	<u>Federal Government (Federal constitution and topics)</u>
<u>GEN ED</u>		<u>Creative Arts</u> course
<u>GEN ED</u>		<u>Life and Physical Sciences</u> course

Second Semester

<u>CRIJ</u>	<u>2328</u>	<u>Police Systems and Practices</u>
<u>GOVT</u>	<u>2306</u>	<u>Texas Government (Texas constitution and topics)</u>
<u>GEN ED</u>		<u>Life and Physical Sciences</u> course
DIRECTED ELECTIVE *		
DIRECTED ELECTIVE *		

* Directed Electives for the Criminal Justice Field of Study are chosen by each transfer university in Texas that offers a Bachelor's

degree in Criminal Justice. For example:

Texas A&M University - Commerce requires CRIJ 1307 and CRIJ 2301.

Texas Woman's University requires CRIJ 1307 and CRIJ 2314.
University of North Texas requires ENGL 2311 and SPCH 1311.

University of Texas at Dallas did not submit any courses at the time of this printing.

Please meet with a Collin College academic advisor to determine which courses would be best to take for completion of this program. If you plan to transfer, also check with your intended transfer college or university prior to beginning this program to verify course transferability.

MUSIC

Program Option:

AA – Music Field of Study

Effective January 25, 2024, this award is no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared this intended program/major prior to January 25, 2024 MUST complete the award no later than August 31, 2025. The courses in this program will continue to be offered by Collin College, but Collin College will no longer be able to award the AA - Music Field of Study degree after August 31, 2025. Please see a Collin College advisor if you have questions.

An Associate of Arts with a Music Field of Study requires 60 credit hours, including 31 credit hours of music coursework and 32 credit hours of General Education Core (with 3 credit hours counting in both categories). Check with your transfer institution before registering for general studies electives to make sure your courses will be degree-applicable to your bachelor's degree at the transfer institution.

This degree plan does not require completion of the Core Curriculum. Instead, students are obligated to satisfy the Field of Study (FOS). Students who wish to complete the Core Curriculum at Collin College should meet with an Academic Advisor to discuss the various options for completing the Core Curriculum.

AA – Music Field of Study

60 credit hours

FIRST YEAR

First Semester

MUSI 1311 Music Theory I
MUSI 1116 Sight Singing and Ear Training I
MUEN X1XX Ensemble
MUAP X2XX Applied Music

ENGL 1301 Composition I
HIST 1301 United States History I

Second Semester

MUSI 1312 Music Theory II
MUSI 1117 Sight Singing and Ear Training II
MUEN X1XX Ensemble
MUAP X2XX Applied Music
GEN ED Mathematics course
HIST 1302 United States History II

SECOND YEAR

First Semester

MUSI 2311 Music Theory III
MUSI 2116 Sight Singing and Ear Training III
MUSI 1307 Music Literature
MUEN X1XX Ensemble
MUAP X2XX Applied Music
GOVT 2305 Federal Government (Federal constitution and topics)
GEN ED Life and Physical Sciences course

Second Semester

MUSI 2312 Music Theory IV
MUSI 2117 Sight Singing and Ear Training IV
MUEN X1XX Ensemble
MUAP X2XX Applied Music
GOVT 2306 Texas Government (Texas constitution and topics)
GEN ED Social and Behavioral Sciences course
GEN ED Life and Physical Sciences course

Recommended Courses for Piano Proficiency
Keyboard (Piano) Competency
4 credit hours

MUSI 1181 Piano Class I
MUSI 1182 Piano Class II
MUSI 2181 Piano Class III
MUSI 2182 Piano Class IV

Baccalaureate Music programs require piano proficiency although the piano skills courses are not part of the guaranteed transfer block. Students are encouraged to take the keyboard competency courses in addition to completion of the Music Field of Study prior to transfer. Students may take a barrier exam to identify the need to take the courses.

ASSOCIATE OF SCIENCE (AS) GENERAL STUDIES AND ASSOCIATE OF SCIENCE WITH FIELD OF STUDY

The Associate of Science degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities and to ensure enrollment in appropriate courses, students should verify course transferability and degree applicability with the Collin College academic advisor and/or visit TransferU at: <http://www.collin.edu/transferu/index.html>.

There are two options to pursue for the Associate of Science Degree (AS):

- Associate of Science Degree (AS) – General Studies
- Associate of Science Degree (AS) – Field of Study

ASSOCIATE OF SCIENCE DEGREES (AS) – GENERAL STUDIES

GENERAL STUDIES

Program Options: AS – General Studies

To earn an Associate of Science (AS) degree with no field of study, complete the 42 credit hour General Education Core, 18 credit hours of general studies electives and any other Associate of Arts (AS) degree requirements. Check with your transfer institution before registering for general studies electives to make sure your courses will be degree applicable to your bachelor's degree at the transfer institution.

AS – General Studies

60 credit hours

FIRST YEAR

First Semester

<u>GEN ED</u>	Communication course
<u>GEN ED</u>	Mathematics course ¹
<u>GEN ED</u>	History course
<u>GEN ED</u>	Social and Behavioral Sciences course
ELECTIVE	Elective ² (3 SCH)

Second Semester

<u>GEN ED</u>	Communication course
ELECTIVE	Mathematics course ¹
<u>GEN ED</u>	History course
<u>GEN ED</u>	Life and Physical Sciences course with lab ³
ELECTIVE	Elective ² (3 SCH)

SECOND YEAR

First Semester

<u>GEN ED</u>	Language, Philosophy & Culture course
<u>GEN ED</u>	Life and Physical Sciences course with lab ³
<u>GEN ED</u>	Government course
ELECTIVE	Elective ² (3 SCH)
<u>GEN ED</u>	Speech course

Second Semester

<u>GEN ED</u>	Government course
<u>GEN ED</u>	Component area option ⁴
<u>GEN ED</u>	Creative Arts course
ELECTIVE	Elective ² (3 SCH)
ELECTIVE	Elective ² (3 SCH)

1. For an AS Degree, Mathematics courses must be chosen from the following: MATH 1314, MATH 1316, MATH 1342, MATH 2305, MATH 2318, MATH 2320, MATH 2412, MATH 2413, MATH 2414, or MATH 2415.

2. For an AS Degree, a minimum of 18 credit hours of degree requirements and general studies electives must be completed. General studies electives may be drawn from any college-level credit course.

3. For an AS Degree, Life & Physical Sciences courses must be chosen from among the following: BIOL 1406, BIOL 1407, BIOL 1414, BIOL 1415, BIOL 2401, BIOL 2402, BIOL 2406, BIOL 2416, BIOL 2421, CHEM 1411, CHEM 1412, CHEM 2423, CHEM 2425, ENVR 1401, ENVR, 1402, GEOL 1403, GEOL 1404, PHYS 1401, PHYS 1402, PHYS 2425 or PHYS 2426. A two-course sequence is recommended, but students should consult with an advisor to meet requirements at transfer institution.

4. Any core course not already utilized to fulfill a component area, or EDUC 1100, EDUC 1300, KINE 1164, KINE 1304, KINE 1338 may fulfill the last hour of core needed. If student earns more than 42 core credit hours, the extra hours may be applied to degree requirements.

The underlined GEN ED courses note required core components for the AS degree. If no class is specified, student has option to choose from that component. Students should consult with an advisor on best options for their chosen field and what is required by their chosen transfer institution.

ASSOCIATE OF SCIENCE DEGREES (AS) – FIELD OF STUDY

For program descriptions, see *Emphasis Areas of Study* section.

For Field of Study Certificate requirements, see *Field of Study* section.

ENGINEERING

Program Options:

AS – Civil Engineering Field of Study

AS – Electrical Engineering Field of Study

AS – Mechanical Engineering Field of Study

Effective January 25, 2024, these programs are no longer eligible to be declared as an intended program/major due to the expiration, by law, of the Texas Higher Education Coordinating Board's (THECB) approval of the curriculum. Students that have already declared these intended programs/majors prior to January 25, 2024 MUST complete the programs/awards no later than August 31, 2025. The courses in these programs will continue to be offered by Collin College, but Collin College will no longer be able to award the degrees in the programs below after August 31, 2025. Please see a Collin College advisor if you have questions.

An Associate of Science with an Engineering Field of Study requires 60 credit hours, including the required field of study coursework and the remaining credit hours of General Education Core. Check with your transfer institution before registering for general studies electives to make sure your courses will be degree-applicable to your bachelor's degree at the transfer institution.

These degree plans do not require completion of the Core Curriculum. Instead, students are obligated to satisfy the Field of Study (FOS). Students who wish to complete the Core Curriculum at Collin College should meet with an Academic Advisor to discuss the various options for completing the Core Curriculum.

AS – Civil Engineering Field of Study

60 credit hours

FIRST YEAR

First Semester

ENGL 1301 Composition I
ENGR 1304 Engineering Graphics

Second Semester

ENGL 2311 Technical and Business Writing (See [Communications](#) options)
HIST 1302 United States History II (See [American History](#) options)
MATH 2414 Calculus II
PHYS 2425 University Physics I

HIST 1301 United States History I (See [American History](#) options)
MATH 2413 Calculus I¹
GEN ED [Creative Arts](#) course
OR
[Social and Behavioral Sciences](#) course

Second Semester

ENGL 2311 Technical and Business Writing (See [Communications](#) options)
HIST 1302 United States History II (See [American History](#) options)
MATH 2414 Calculus II
PHYS 2425 University Physics I

SECOND YEAR

First Semester

ENGR 2301 Engineering Mechanics – Statics
GOVT 2305 Federal Government (Federal constitution and topics)
MATH 2415 Calculus III
PHYS 2426 University Physics II

Second Semester

CHEM 1409 General Chemistry for Engineering Majors
ENGR 2302 Engineering Mechanics - Dynamics
ENGR 2332 Mechanics of Materials
GOVT 2306 Texas Government (Texas constitution and topics)
MATH 2320 Differential Equations

1. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.

If you plan to transfer, check with your intended transfer college or university prior to beginning this program to verify course transferability.

AS – Electrical Engineering Field of Study

60 credit hours

FIRST YEAR

First Semester

COSC 1420 C Programming
ENGL 1301 Composition I
HIST 1301 United States History I (See [American History](#) options)
MATH 2413 Calculus I¹
GEN ED [Creative Arts](#) course

SECOND YEAR

First Semester

ENGR 1201 Introduction to Engineering
GOVT 2305 Federal Government (Federal constitution and topics)
MATH 2415 Calculus III

PHYS 2426 University Physics II

Second Semester

ENGR 2105 Electric Circuits I Laboratory
 ENGR 2305 Electric Circuits I
 GOVT 2306 Texas Government (Texas constitution and topics)
 MATH 2320 Differential Equations
 GEN ED Language, Philosophy & Cultural course
 GEN ED Social/Behavioral Sciences course

1. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.

If you plan to transfer, check with your intended transfer college or university prior to beginning this program to verify course transferability.

AS – Mechanical Engineering Field of Study

60 credit hours

FIRST YEAR

First Semester

ENGL 1301 Composition I
 GOVT 2306 Texas Government (Texas constitution and topics)
 HIST 1301 United States History I (See [American History](#) options)
 MATH 2413 Calculus I ¹
 GEN ED Creative Arts course
 OR
Social and Behavioral Sciences course

Second Semester

ENGL 2311 Technical and Business Writing (See [Communications](#) options)
 HIST 1302 United States History II (See [American History](#) options)
 MATH 2414 Calculus II
 PHYS 2425 University Physics I

SECOND YEAR

First Semester

ENGR 2301 Engineering Mechanics – Statics
 GOVT 2305 Federal Government (Federal constitution and topics)
 MATH 2415 Calculus III
 PHYS 2426 University Physics II

Second Semester

CHEM 1409 General Chemistry for Engineering Majors
 ENGR 2302 Engineering Mechanics - Dynamics
 ENGR 2305 Electric Circuits I ²
 ENGR 2332 Mechanics of Materials
 MATH 2320 Differential Equations

1. Students should consult with an academic advisor since one or more mathematics courses may be required before enrolling in MATH 2413.

2. Course has prerequisite/corequisite of MATH 2320 that must be fulfilled in order to enroll.

If you plan to transfer, check with your intended transfer college or university prior to beginning this program to verify course transferability.

ASSOCIATE OF ARTS IN TEACHING (AAT)

Take the first steps toward becoming a teacher with an Associate of Arts in Teaching (AAT) degree from Collin College.

Collin College offers degree plans with three different specializations: early childhood through Grade 6, middle grades (grades 4-8) and secondary (grades 6-12, 7-12 or 8-12, depending on teaching content area). Specializations will prepare students for transfer to a baccalaureate program that leads to initial Texas teacher certification.

Students seeking all-level certifications (early childhood through Grade 12) like special education, theater, and art, can transfer EDUC 1301 and EDUC 2301 to baccalaureate institutions. Students should check with transfer advisors for other course requirements.

Students who complete the AAT will also complete 32 observation hours in a public school classroom.

Some TECA courses may be transferable in addition to the AAT. Students should contact their intended teacher education program for detailed information prior to registering. Contact names and phone numbers are available from a Collin College academic advisor or go to <http://www.collin.edu/transferu/index.html>.

EDUC 1301 and EDUC 2301 are offered in eight-week, sixteen-week, and weekend express formats. Courses are offered face-to-face and online. EDUC 1301 is a prerequisite for EDUC 2301.

AAT Degree Requirements

For an AAT degree, you must meet the following requirements:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the [General Education Core](#) of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
4. Earn a minimum of 15 credit hours (25% of the degree) at Collin College.
5. Complete all the courses listed for one of three AAT diplomas:
 - AAT – Early Childhood – Grade 6
 - AAT – Middle Grades (Grades 4-8)
 - AAT – High School (Grades 8-12)

AAT – EARLY CHILDHOOD – GRADE 6

The AAT – Early Childhood – Grade 6 is designed for the student pursuing a Certification for only the elementary grades. Areas are: Generalist; Bilingual Generalist; ESL Generalist; other content area teaching field/academic disciplines/interdisciplinary TBA.

Below is a recommended course sequence that will allow a student to earn the degree. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

AAT – Early Childhood – Grade 6

60 credit hours

FIRST YEAR

First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u>
<u>GEOL</u>	<u>1401</u>	<u>Earth Sciences for Non-Science Majors I</u>
<u>HIST</u>	<u>1301</u>	<u>United States History I</u>
<u>EDUC</u>	<u>1100</u>	<u>Learning Framework</u>

Second Semester

<u>ENGL</u>	<u>1302</u>	<u>Composition II</u>
<u>MATH</u>	<u>1350</u>	<u>Mathematics for Teachers (Fundamentals of Mathematics I)</u>
<u>BIOL</u>	<u>1408</u>	<u>Biology for Non-Science Majors I</u>
<u>HIST</u>	<u>1302</u>	<u>United States History II</u>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u>

SECOND YEAR

First Semester

<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u>
<u>GOVT</u>	<u>2305</u>	<u>Federal Government (Federal constitution and topics)</u>
<u>ARTS</u>	<u>1301</u>	<u>Art Appreciation</u>
<u>EDUC</u>	<u>1301</u>	<u>Introduction to the Teaching Profession</u>
<u>MATH</u>	<u>1351</u>	<u>Mathematics for Teachers II (Fundamentals of Mathematics II)</u>

Second Semester

<u>GOVT</u>	<u>2306</u>	<u>Texas Government (Texas constitution and topics)</u>
<u>PHYS</u>	<u>1415</u>	<u>Physical Science I¹</u>
<u>ENGL</u>	<u>2327</u>	<u>American Literature I</u>
<u>EDUC</u>	<u>2301</u>	<u>Introduction to Special Populations</u>

Third Semester

<u>CDEC</u>	<u>1270</u>	<u>Introduction to Teaching ESL²</u>
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1. Prior to enrolling in this course, please meet with the Education academic advisor or the Education Discipline Lead.
2. CDEC 1270 is only offered during the Maymester session.

AAT – MIDDLE GRADES (GRADES 4-8)

The AAT – Middle Grades (Grades 4-8) is for grade 4-8 and Early Childhood-Grade 12 Special Education. The AAT is designed to satisfy the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification in all Grades 4-8 certification areas and EC-12 Special Education. The Grade 4-8 Certification areas are: Generalist; Bilingual Generalist; ESL Generalist; English Language Arts & Reading; English Language Arts & Reading and Social Studies; Mathematics; Science; Mathematics and Science; Social Studies; other content area teaching fields/academic disciplines/interdisciplinary TBA.

Early Childhood to Grade 12 Special Education
Certification areas are: EC - 12 Special Education; other content area teaching fields/academic disciplines/interdisciplinary TBA. This degree is for students who want to teach grades EC-Grade 4 and higher.

Below is a recommended course sequence that will allow a student to earn the degree. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

AAT – Middle Grades (Grades 4-8)

60 credit hours

FIRST YEAR

First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u>
<u>GEOL</u>	<u>1401</u>	<u>Earth Sciences for Non-Science Majors I</u>
<u>HIST</u>	<u>1301</u>	<u>United States History I</u>
<u>EDUC</u>	<u>1100</u>	<u>Learning Framework</u>

Second Semester

<u>ENGL</u>	<u>1302</u>	<u>Composition II</u>
<u>MATH</u>	<u>1350</u>	<u>Mathematics for Teachers (Fundamentals of Mathematics I)</u>
<u>BIOL</u>	<u>1408</u>	<u>Biology for Non-Science Majors I</u>
<u>HIST</u>	<u>1302</u>	<u>United States History II</u>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u>

SECOND YEAR

First Semester

<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u>
<u>GOVT</u>	<u>2305</u>	<u>Federal Government (Federal constitution and topics)</u>
<u>ARTS</u>	<u>1301</u>	<u>Art Appreciation</u>
<u>EDUC</u>	<u>1301</u>	<u>Introduction to the Teaching Profession</u>
<u>MATH</u>	<u>1351</u>	<u>Mathematics for Teachers II (Fundamentals of Mathematics II)</u>

Second Semester

<u>GOVT</u>	<u>2306</u>	<u>Texas Government (Texas constitution and topics)</u>
<u>PHYS</u>	<u>1415</u>	<u>Physical Science I¹</u>
<u>ENGL</u>	<u>2327</u>	<u>American Literature I</u>
<u>EDUC</u>	<u>2301</u>	<u>Introduction to Special Populations</u>

Third Semester

<u>CDEC</u>	<u>1270</u>	<u>Introduction to Teaching ESL²</u>
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1. Prior to enrolling in this course, please meet with the Education academic advisor or the Education Discipline Lead.
2. CDEC 1270 is only offered during the Maymester session.

AAT – HIGH SCHOOL (GRADES 8-12)

The AAT – High School (Grades 8-12) is for grades 8-12 and other Early Childhood-Grade 12. Licensure is designed to satisfy the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification in all grades 8-12 and specialized EC - 12 certification areas. The Grades 8 - 12 Certification areas are: History; Social Studies; Mathematics; Life Sciences; Physical Sciences; Science; English Language Arts & Reading; Computer Science; Technology Applications; Health Science Technology Education; Speech; Journalism; Business Education; Marketing Education; Mathematics & Physics; Agricultural Sciences & Technology; Technology Education; Languages other than English; Family and Consumer Sciences; Dance; Mathematics & Physical Science & Engineering; Human Development and Family Studies; Hospitality; Nutrition and Food Sciences; other content area teaching fields/academic disciplines/interdisciplinary TBA.

Below is a recommended course sequence that will allow a student to earn the degree. Please consult with an advisor to examine alternate sequences to meet individual academic goals.

AAT – High School (Grades 8-12)

60 credit hours

FIRST YEAR

First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u>
<u>GEOL</u>	<u>1401</u>	<u>Earth Sciences for Non-Science Majors I</u>
<u>HIST</u>	<u>1301</u>	<u>United States History I¹</u>
<u>EDUC</u>	<u>1100</u>	<u>Learning Framework</u>

Second Semester

<u>ENGL</u>	<u>1302</u>	<u>Composition II</u>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u>
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u>

BIOL 1408 Biology for Non-Science Majors I
HIST 1302 United States History II ¹

SECOND YEAR

First Semester

ECON 2301 Principles of Macroeconomics
GOVT 2305 Federal Government (Federal constitution and topics)
ARTS 1304 Art History II (14th century to the present)
 EDUC 1301 Introduction to the Teaching Profession
 X3XX Academic Discipline/Teaching Field ¹

Second Semester

GOVT 2306 Texas Government (Texas constitution and topics)
 EDUC 2301 Introduction to Special Populations
 X3XX Academic Discipline/Teaching Field ¹
 X3XX Academic Discipline/Teaching Field ¹
 X3XX Academic Discipline/Teaching Field ¹

1. *Additional Twelve (12) Credit hours of courses in academic disciplines or content area teaching fields*

WORKFORCE EDUCATION PROGRAMS

Associate of Applied Science Degree (AAS)

The Associate of Applied Science degree (AAS) is awarded upon completion of a prescribed program of study designed to prepare students to enter and compete in the job market. Fifteen credit hours must be earned in residency at Collin College. AAS curricula enable the graduate to enter an occupation with marketable skills, an acceptable level of technical competency, and the ability to communicate effectively. In addition, an AAS degree helps prepare students for life-long learning.

AAS Degree Plan Requirements

AAS degrees require 60-68 credit hours with at least half of the coursework in a technical specialty area of the degree. All AAS degrees require a minimum of 15 credit hours of general education to develop the foundational academic skills of workforce education students.

Workforce Certificate Programs

In addition to the Associate of Applied Science workforce degrees, Collin College offers a variety of certificates in applied science fields.

Collin College offers certificate programs designed to meet specific employment needs of the community. Students who enroll in certificate programs are generally interested in re-entering the job market after an absence, changing careers, or upgrading job-related skills in order to enhance employment specialization. Although certificates are normally one year in length, the specific number of credit hours varies by program area.

A Level One Certificate consists of 15-42 credit hours. Students in Level One Certificates are not required to meet the Texas Success Initiative (TSI) requirements. Level One Certificates do not have a general education requirement.

Level Two Certificate programs consist of 30-51 credit hours. Students in all Level Two Certificates must meet the requirements of the Texas Success Initiative (TSI). An Occupational Skills Award (OSA) is a sequence of credit courses totaling 9-14 credit hours. An Enhanced Skills Certificate (ESC) requires the completion of an AAS or higher degree prior to completing 6-12 additional credit hours in a specific program area.

Workforce Program Cooperative Work Experience (Co-Op) Courses

Cooperative Education courses are required for some workforce program degree plans or are available as an elective in other degree programs. Co-Op is not an option for all programs, and students should check their degree plans for opportunities. Interested students should connect with a Workforce Programs career coach at least one (1)

month prior to registration for information and eligibility requirements.

Prior to enrolling in the program, students must obtain a supervised job in an area related to their major that is approved by a Workforce Programs career coach, associate academic/workforce dean, or program director. Job search assistance may be available; however, the student is primarily responsible for obtaining employment to use for Co-Op.

Eligible students enroll and pay for the Co-Op course, receive academic credit, and gain valuable work experience in their major field of study.

Students enrolled in this program must set goals, attend professional development seminars, work the required minimum number of hours, write a reflection paper, meet with an assigned faculty member, and receive an employer performance review.

F-1 visa students may be eligible to enroll in a Co-Op class once certain requirements are met. The Co-Op or internship course must be a requirement of F-1 visa students' degree plans and cannot be a degree plan option or elective.

For specific requirements related to F-1 visa students, contact the International Student Office (ISO) at 972.516.5012, email iso@collin.edu, or go to <https://www.collin.edu/advising/international/>. For more information, go to www.collin.edu/studentresources/support/internships/coopsinternships.html.

WORKFORCE DEGREE PLANS BY PROGRAM

ACTIVITY CARE PROFESSIONAL

Department Website:

<http://www.collin.edu/departments/activitycare>

Program Options:

AAS – Activity Care Professional

Certificate Level 1 – Activity Care Professional

By blending the certified nursing assistant (CNA) experience with activity professional training, Collin College's Activity Care Professional Program was designed. The rationale behind the ACP program is that “staying healthy and being involved in life is an important component of successful aging” (Bender, 2018). The need is imperative for individuals to be trained and certified to work in this field as “ten thousand people will turn 65 every day for the next 11 years and by 2029, 18 percent of the U.S. population will be 65 or older” (2018). Collin College's Activity Care Professional program provides students the unique opportunity to enter into a career path that will prepare them to help meet the healthcare profession's overarching need “to help older adults live longer, healthier, happier lives” (2018).

Students who graduate from Collin College's Activity Care Professional Program will have a greater likelihood of long-term success in the fastest growing, highest demand sector for tomorrow's health care professionals meeting the needs for holistic population health and well care. The opportunities in this field for advanced placement, growth, innovation, and further education are endless. These Activity Care Professionals will be not only be hired in long-term care, nursing home, adult day centers, and memory care facilities, but are integral to population health, community health, the rehabilitation service industry, in PACE (Program of All-Inclusive Care of the Elderly), hospice, home care, assisted living facilities, skilled nursing, geriatric services, Autism Speaks, Special Olympics, Veterans' Affairs, balance recovery, brain health and memory care services, in-home rehabilitation, and in athletic and sports rehabilitation services. The activity care professional's value to healthcare cannot be underestimated, given that those who work in this profession help to advance the physical, psychosocial, and cognitive wellbeing of clients and residents, meaningful engagement being the foundation of person-centered care (NAAPCC, 2018).

Traditional adult students wishing to enroll in the program should possess a High School Diploma or GED prior to beginning the course work. Students wishing to enter into the degree plan, will need to make application to do so, the requirements for which will include the need to take the

test for Health Occupations with 75% minimum competency rate earned, which will be waived for those who hold current State of Texas CNA certification.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your Program Director and check with your licensing/certifying entity, if any, to determine your status.

The curriculum contains both transfer and workforce courses. The workforce courses are mainly offered at the Technical Campus and the Wylie Campus. For additional information, please contact the Health Professions Director at 214-491-6253.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in “Functional Abilities/Core Performance Standards” documents provided in the program information and application forms. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ADDITIONAL ADMISSIONS REQUIREMENTS

In addition to meeting Collin College Admission & Graduation Requirements, students would need to complete the following prior to acceptance to the program.

- Program Application
- Interview
- Drug Screening
- Background Check
- Test for Health Occupations with 75% minimum competency rate will need to be earned prior to entering into the Activity Professional program.
- In order to graduate from the program, students must successfully complete each course in the program with a grade of 75% C, or better.
- Students must also complete the 200 clinical hours (externship) in a long-term, nursing home, or assisted living residential care setting as assigned by the college.

Prior to enrolling in any clinical courses, students must complete all immunizations required by the Texas Department of State Health Services (TDSHS)*. All required workforce courses require a minimum grade of 75% to continue in the program.

* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.

Health Insurance - All Health Profession students are required to show proof of health insurance prior to starting clinical rotations each semester.

CPR - Requires current American Heart Association Basic Life Support CPR certification.

AAS – Activity Care Professional

60 credit hours

FIRST YEAR

First Semester

HITT	1305	Medical Terminology I
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
HPRS	1201	Introduction to Health Professions ¹
GERS	1301	Introduction to Gerontology
GERS	1304	Activity Directing I

Second Semester

HPRS	2301	Pathophysiology
NURA	1160	Clinical - Nursing Assistant/Aide and Patient Care Assistant/Aide
NURA	1301	Nurse Aide for Health Care
<u>BIOL</u>	<u>2404</u>	<u>Human Anatomy and Physiology Basic</u> (See Natural Sciences options)
GERS	1160	Clinical - Gerontology

Third Semester

HPRS	2310	Basic Health Profession Skills II ²
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)

SECOND YEAR

First Semester

GERS	1307	Activity Directing II
GERS	2160	Clinical - Gerontology
HITT	2328	Introduction to Public Health
HPRS	2232	Health Care Communications
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)

Second Semester

GERS	1343	Psychology of Adult Development and Aging
GERS	2161	Clinical - Gerontology
HPRS	1303	End of Life Issues
HPRS	2321	Medical Law and Ethics for Health Professionals
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Third Semester

GERS 2332 Advanced Activity Director (Capstone)

1. May substitute HPRS 1204
2. May substitute HPRS 1310

Certificate Level 1 – Activity Care Professional

36 credit hours

FIRST YEAR

First Semester

HITT	1305	Medical Terminology I
HPRS	1201	Introduction to Health Professions ¹
GERS	1301	Introduction to Gerontology
GERS	1304	Activity Directing I

Second Semester

HPRS	2301	Pathophysiology
GERS	1160	Clinical - Gerontology
NURA	1160	Clinical - Nursing Assistant/Aide and Patient Care Assistant/Aide
NURA	1301	Nurse Aide for Health Care

Third Semester

GERS	1307	Activity Directing II
GERS	2160	Clinical - Gerontology
HPRS	2310	Basic Health Profession Skills II ²

SECOND YEAR

First Semester

GERS	1343	Psychology of Adult Development and Aging
GERS	2161	Clinical - Gerontology
GERS	2332	Advanced Activity Director (Capstone)
HPRS	1303	End of Life Issues

1. May substitute HPRS 1204
2. May substitute HPRS 1310

ANIMATION & GAME ART

Also see [Video Production](#) workforce program.

Program Options:

AAS – Animation & Game Art

Certificate Level 1 – Animation & Game Art

Certificate Level 3 – ESC – Advanced Animation & Game Art Production

Design a career that you will love as a 3-D animator or game artist. Collin College's 3-D Animation track provides you with the tools and training you need to take a project from concept to reality, while encouraging your creativity. Learn how to execute 3-D animation and still imagery for advertising, industrial visualization, entertainment and corporate communication in an environment designed to emphasize creative concepts.

The college's Game Art track focuses on 2-D and 3-D art and animation skills for gaming. Learn level design and high-end 3-D graphics integration in a group project environment.

Learn from professors who know the industry firsthand. Collin College's Communication Design Department is staffed by full-time faculty with up-to-date industry experience and associate professors who still work in their field.

AAS – Animation & Game Art

60 credit hours

FIRST YEAR

First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTV	1345	3-D Modeling and Rendering I
ARTV	1371	Storyboard and Concept Development
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
FLMC	1301	History of Animation Techniques

Second Semester

ARTC	1302	Digital Imaging I
ARTV	1341	3-D Animation I
FLMC	1331	Video Graphics and Visual Effects I
GAME	1303	Introduction to Game Design and Development
ARTV	1303	Basic Animation

SECOND YEAR

First Semester

ARTV	2345	3-D Modeling and Rendering II
ARTV	2351	3-D Animation II
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course
<u>GEN ED</u>		<u>Mathematics/Natural Sciences</u> course
ARTV	1351	Digital Video
		or
GAME	2359	Game and Simulation Group Project

Second Semester

ARTV	2335	Portfolio Development for Animation (Capstone)
GAME	2325	3-D Animation II – Character Set-Up
<u>GEN ED</u>		<u>Social/Behavioral Sciences</u> course
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

Certificate Level 1 – Animation & Game Art

42 credit hours

FIRST YEAR

First Semester

ARTC	1325	Introduction to Computer Graphics
ARTV	1345	3-D Modeling and Rendering I

ARTV	1371	Storyboard and Concept Development
FLMC	1301	History of Animation Techniques

Second Semester

ARTC	1302	Digital Imaging I
ARTV	1303	Basic Animation
ARTV	1341	3-D Animation I
FLMC	1331	Video Graphics and Visual Effects I
GAME	1303	Introduction to Game Design and Development

SECOND YEAR

First Semester

ARTV	2345	3-D Modeling and Rendering II
ARTV	2351	3-D Animation II
ARTV	1351	Digital Video
		or
GAME	2359	Game and Simulation Group Project

Second Semester

ARTV	2335	Portfolio Development for Animation (Capstone)
GAME	2325	3-D Animation II – Character Set-Up

Certificate Level 3 – ESC – Advanced Animation & Game Art Production

12 credit hours

ARTV	2371	Advanced Skill Development for Animation and Games
FLMC	2331	Video Graphics and Visual Effects II
ELECTIVE	*	
ELECTIVE	*	

* *Electives (6 credit hours): ARTC 2305, GAME 2309, GAME 2336, GAME 2341, GAME 2386, MUSC 1327*

AUTOMOTIVE TECHNOLOGY

Program Options:

AAS – Automotive Technology

AAS – Automotive Technology – Honda PACT Track

AAS – Automotive Technology – Toyota T-TEN Track

Certificate Level 1 - Express Maintenance Technician (XMT)

Certificate Level 1 - Maintenance & Light Repair Technician (MLR)

Certificate Level 2 - Automotive Service Technician (AST)

The Automotive Technology program is designed to prepare students for high-skill, high-demand positions in the automotive industry. Completers will have opportunities in dealerships; large tire, lube and repair chains; as well as independent shops. In addition to

earning stackable certificates, marketable skills, and AAS degrees, completers will be prepared to earn industry recognized ASE certifications qualifying them for Maintenance and Light Repair (MLR) or Automotive Service Technician (AST) or Master Automobile Service Technology (MAST) designation.

Honda Professional Automotive Career Training (PACT)
The Honda Professional Automotive Career Training (PACT) program provides students the training to maintain, diagnose, and repair two of the most popular brands in automotive. The two-year Associate of Applied Science degree will allow students to complete up to 70% of the training required to become a qualified professional automotive technician for any Honda or Acura dealer. Additionally, students will have the opportunity to earn at least two Automotive Service Excellence (ASE) certifications and be sponsored for an entry-level position in a Honda or Acura dealership while in the program. Enrollment into the program requires departmental permission. The ideal student must meet employment eligibility requirements for Honda and Acura franchise dealerships, which may include a background check, drug screenings, and verification of driving record.

Automotive Technology Toyota T-TEN
Students enrolled in the Toyota Technician-Training and Education Network (T-TEN) at Collin College seek to become professional technicians at a Toyota or Lexus dealership. Upon completing the two-year degree, students will have earned a minimum of 640 internship hours as an entry-level technician at a Toyota or Lexus dealership, passed at least two Automotive Service Excellence (ASE) certifications, and earned nine Toyota certifications. The Toyota T-TEN program has one of the highest training standards in the automotive industry, accelerating a student into the automotive workforce.

Enrollment into the program requires departmental permission. The ideal student must meet employment eligibility requirements for any Toyota or Lexus franchise dealerships, which may include a background check, drug screenings, and verification of driving record.

AAS – Automotive Technology

60 credit hours

FIRST YEAR

First Semester

AUMT 1305	Introduction to Automotive Technology <i>(offered first 5-weeks)</i>
AUMT 1307	Automotive Electrical Systems <i>(offered second 5-weeks)</i>
AUMT 1316	Automotive Suspension and Steering Systems <i>(offered third 5-weeks)</i>

ECON 1301 Introduction to Economics
(See [Social/Behavioral Sciences](#) options)

Second Semester

AUMT 1310	Automotive Brake Systems <i>(offered first 5-weeks)</i>
AUMT 2321	Automotive Electrical Diagnosis and Repair <i>(offered second 5-weeks)</i>
AUMT 1345	Automotive Climate Control Systems <i>(offered third 5-weeks)</i>
AUMT 2380	Cooperative Education I - Automobile/Automotive Mechanics Technology/Technician <i>(full 16 weeks)</i>

GEN ED [Humanities/Fine Arts](#) course

Third Semester (Summer)

AUMT 1319	Automotive Engine Repair <i>(offered second 5-weeks)</i>
<u>SPCH 1321</u>	<u>Business and Professional Communication</u> (See Speech options)

SECOND YEAR

First Semester

AUMT 2313	Automotive Drive Train and Axles <i>(offered first 5-weeks)</i>
AUMT 2317	Automotive Engine Performance Analysis I <i>(offered second 5-weeks)</i>
AUMT 2325	Automatic Transmission and Transaxle <i>(offered third 5-weeks)</i>
<u>ENGL 1301</u>	<u>Composition I</u>

Second Semester

AUMT 2334	Automotive Engine Performance Analysis II <i>(offered first 5-weeks)</i>
AUMT 2337	Automotive Electronics <i>(offered second 5-weeks)</i>
AUMT 2307	Hybrid and/or Battery Electric Vehicle (BEV) Systems Diagnostics <i>(offered third 5-weeks)</i>
AUMT 2381	Cooperative Education II - Automobile/Automotive Mechanics Technology/Technician (Capstone) <i>(full 16 weeks)</i>
<u>MATH 1332</u>	<u>Contemporary Math (Quantitative Reasoning)</u> (See Mathematics options)

AAS – Automotive Technology – Honda PACT Track

60 credit hours

FIRST YEAR

First Semester

AUMT 1305	Introduction to Automotive Technology <i>(offered first 5-weeks)</i>
AUMT 1307	Automotive Electrical Systems <i>(offered second 5-weeks)</i>

- AUMT 1316 Automotive Suspension and Steering Systems (*offered third 5-weeks*)
 ECON 1301 Introduction to Economics
 (See [Social/Behavioral Sciences](#) options)

Second Semester

- AUMT 1310 Automotive Brake Systems (*offered first 5-weeks*)
 AUMT 2321 Automotive Electrical Diagnosis and Repair (*offered second 5-weeks*)
 AUMT 1345 Automotive Climate Control Systems (*offered third 5-weeks*)
 AUMT 2380 Cooperative Education I - Automobile/Automotive Mechanics Technology/Technician (*full 16 weeks*)
GEN ED [Humanities/Fine Arts](#) course

Third Semester (Summer)

- AUMT 1319 Automotive Engine Repair (*offered first 5-weeks*)
 SPCH 1321 Business and Professional Communication (See [Speech](#) options)

SECOND YEAR**First Semester**

- AUMT 2317 Automotive Engine Performance Analysis I (*offered first 5-weeks*)
 AUMT 2334 Automotive Engine Performance Analysis II (*offered second 5-weeks*)
 AUMT 2325 Automatic Transmission and Transaxle (*offered third 5-weeks*)
 ENGL 1301 Composition I

Second Semester

- AUMT 2313 Automotive Drive Train and Axles (*offered first 5-weeks*)
 AUMT 2307 Hybrid and/or Battery Electric Vehicle (BEV) Systems Diagnostics (*offered second 5-weeks*)
 AUMT 2337 Automotive Electronics (*offered third 5-weeks*)
 AUMT 2381 Cooperative Education II - Automobile/Automotive Mechanics Technology/Technician (Capstone) (*full 16 weeks*)

- MATH 1332 Contemporary Math (Quantitative Reasoning) (See [Mathematics](#) options)

AAS – Automotive Technology – Toyota T-TEN Track

60 credit hours

FIRST YEAR**First Semester**

- AUMT 1305 Introduction to Automotive Technology (*offered first 5-weeks*)
 AUMT 1307 Automotive Electrical Systems (*offered second 5-weeks*)
 AUMT 1310 Automotive Brake Systems (*offered third 5-weeks*)
 ECON 1301 Introduction to Economics
 (See [Social/Behavioral Sciences](#) options)

Second Semester

- AUMT 2321 Automotive Electrical Diagnosis and Repair (*offered first 5-weeks*)
 AUMT 1316 Automotive Suspension and Steering Systems (*offered second 5-weeks*)
 AUMT 1345 Automotive Climate Control Systems (*offered third 5-weeks*)
 AUMT 2380 Cooperative Education I - Automobile/Automotive Mechanics Technology/Technician (*full 16 weeks*)
GEN ED [Humanities/Fine Arts](#) course

Third Semester (Summer)

- AUMT 1319 Automotive Engine Repair (*offered first 5-weeks*)
 SPCH 1321 Business and Professional Communication (See [Speech](#) options)

SECOND YEAR**First Semester**

- AUMT 2313 Automotive Drive Train and Axles (*offered first 5-weeks*)
 AUMT 2317 Automotive Engine Performance Analysis I (*offered second 5-weeks*)
 AUMT 2325 Automatic Transmission and Transaxle (*offered third 5-weeks*)
 ENGL 1301 Composition I

Second Semester

- AUMT 2334 Automotive Engine Performance Analysis II (*offered first 5-weeks*)
 AUMT 2337 Automotive Electronics (*offered second 5-weeks*)
 AUMT 2307 Hybrid and/or Battery Electric Vehicle (BEV) Systems Diagnostics (*offered third 5-weeks*)
 AUMT 2381 Cooperative Education II - Automobile/Automotive Mechanics Technology/Technician (Capstone) (*full 16 weeks*)
 MATH 1332 Contemporary Math (Quantitative Reasoning) (See [Mathematics](#) options)

Certificate Level 1 - Express Maintenance Technician (XMT)

15 credit hours

FIRST YEAR

First Semester

AUMT 1305	Introduction to Automotive Technology <i>(offered first 5-weeks)</i>
AUMT 1307	Automotive Electrical Systems <i>(offered second 5-weeks)</i>
AUMT 1316	Automotive Suspension and Steering Systems <i>(offered third 5-weeks)</i>

Second Semester

AUMT 1310	Automotive Brake Systems <i>(offered first 5-weeks)</i>
AUMT 2310	Automotive Service Consultant ¹ (Capstone)
or	
AUMT 2380	Cooperative Education I - Automobile/Automotive Mechanics Technology/Technician ² (Capstone)

1. Only applicable to Certificate Level 1 - Express Maintenance Technician (XMT). If the student chooses to continue in the Automotive Technology program after completion of this course and earn any additional awards, they will be required to complete AUMT 2380.
2. May be offered in first semester if student is eligible for Cooperative Education opportunity to allow for certificate completion in one semester.

Certificate Level 1 - Maintenance & Light Repair Technician (MLR)

24 credit hours

FIRST YEAR

First Semester

AUMT 1305	Introduction to Automotive Technology <i>(offered first 5-weeks)</i>
AUMT 1307	Automotive Electrical Systems <i>(offered second 5-weeks)</i>
AUMT 1316	Automotive Suspension and Steering Systems <i>(offered third 5-weeks)</i>

Second Semester

AUMT 1310	Automotive Brake Systems <i>(offered first 5-weeks)</i>
AUMT 2321	Automotive Electrical Diagnosis and Repair <i>(offered second 5-weeks)</i>
AUMT 1345	Automotive Climate Control Systems <i>(offered third 5-weeks)</i>
AUMT 2380	Cooperative Education I - Automobile/Automotive Mechanics Technology/Technician

Third Semester

AUMT 1319	Automotive Engine Repair (Capstone) <i>(offered second 5-weeks)</i>
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Certificate Level 2 - Automotive Service Technician (AST)

45 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

AUMT 1305	Introduction to Automotive Technology <i>(offered first 5-weeks)</i>
AUMT 1307	Automotive Electrical Systems <i>(offered second 5-weeks)</i>
AUMT 1316	Automotive Suspension and Steering Systems <i>(offered third 5-weeks)</i>

Second Semester

AUMT 1310	Automotive Brake Systems <i>(offered first 5-weeks)</i>
AUMT 2321	Automotive Electrical Diagnosis and Repair <i>(offered second 5-weeks)</i>
AUMT 1345	Automotive Climate Control Systems <i>(offered third 5-weeks)</i>
AUMT 2380	Cooperative Education I - Automobile/Automotive Mechanics Technology/Technician

Third Semester

AUMT 1319	Automotive Engine Repair
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SECOND YEAR

First Semester

AUMT 2313	Automotive Drive Train and Axles <i>(offered first 5-weeks)</i>
AUMT 2317	Automotive Engine Performance Analysis I <i>(offered second 5-weeks)</i>
AUMT 2325	Automatic Transmission and Transaxle <i>(offered third 5-weeks)</i>

Second Semester

AUMT 2334	Automotive Engine Performance Analysis II <i>(offered first 5-weeks)</i>
AUMT 2337	Automotive Electronics <i>(offered second 5-weeks)</i>
AUMT 2307	Hybrid and/or Battery Electric Vehicle (BEV) Systems Diagnostics <i>(offered third 5-weeks)</i>
AUMT 2381	Cooperative Education II - Automobile/Automotive Mechanics Technology/Technician (Capstone)

BANKING AND FINANCIAL SERVICES

Program Options:

AAS – Banking and Financial Services

Certificate Level 1 – Banking

Certificate Level 1 – Financial Services

The Banking and Financial Services degree and certificate programs at Collin College are designed to prepare students for a variety of positions in the Banking and Financial Services sector. Students will learn about the frameworks of laws and regulations in the Banking and Financial Services sector as well as gain a broad knowledge of business activities.

AAS – Banking and Financial Services

60 credit hours

FIRST YEAR

First Semester

BNKG 1303 Principles of Bank Operations
 BNKG 1347 Bank Marketing
 BUSG 1304 Financial Literacy
 GEN ED [Mathematics](#) course

Second Semester

BNKG 1345 Consumer Lending
 BNKG 1349 Commercial Lending
 ENGL 1301 [Composition I](#)
 MRKG 2333 Principles of Selling

Third Semester

ACCT 2301 Principles of Financial Accounting
 BNKG 2380 Cooperative Education – Banking and Financial Support Services
 GEN ED [Social/Behavioral Sciences](#) course

SECOND YEAR

First Semester

ACCT 2302 Principles of Managerial Accounting
 BNKG 1340 Money and Financial Markets
 BNKG 1356 Analyzing Financial Statements
 BUSA 1313 Investments
 GEN ED [Humanities/Fine Arts](#) course

Second Semester

BCIS 1305 Business Computer Applications
 BMGT 1341 Business Ethics
 BUSA 1315 Investments and Securities (Capstone)
 GEN ED [Speech](#) course

Certificate Level 1 – Banking

18 credit hours

First Semester

BNKG 1303 Principles of Bank Operation
 BNKG 1347 Bank Marketing
 BUSG 1304 Financial Literacy

Second Semester

BNKG 1345 Consumer Lending
 BNKG 1349 Commercial Lending (Capstone)
 MRKG 2333 Principles of Selling

Certificate Level 1 – Financial Services

18 credit hours

First Semester

BNKG 1340 Money and Financial Markets
 BNKG 1356 Analyzing Financial Statements
 BUSA 1313 Investments

Second Semester

BMGT 1341 Business Ethics
 BUSA 1315 Investments and Securities (Capstone)
 ELECTIVE *

* *Elective (3 credit hours): ACCT 2301, BCIS 1305, or BNKG 2380*

BIOMEDICAL EQUIPMENT TECHNOLOGY

Program Options:

AAS – Biomedical Equipment Technology

Collin College's Biomedical Equipment Technology program provides students with the training and experience to ensure today's life-saving medical technology and equipment is in top working order. If you want to be a part of the high growth health care field, but don't want to work directly with patients, consider joining this hands-on opportunity to participate today!

Biomedical Equipment Technicians install, repair and maintain the equipment used in modern hospitals, clinics and medical facilities. The need for these highly-skilled technicians continues to grow and expand as technology becomes inseparable from modern patient care.

AAS – Biomedical Equipment Technology

60 credit hours

FIRST YEAR

First Semester

CETT 1307 Fundamentals of Electronics
 CETT 1425 Digital Fundamentals
 HITT 1305 Medical Terminology I
 ENTC 1171 Introduction to Engineering Technology
 TECM 1343 Technical Algebra and Trigonometry ¹

Second Semester

BIOL	2404	<u>Human Anatomy and Physiology Basic</u> (See Natural Sciences options)
CETT	1409	DC-AC Circuits
CPMT	1305	IT Essentials I: PC Hardware and Software
BIOM	2311	General Medical Equipment I
ENGL	1301	<u>Composition I</u>

SECOND YEAR**First Semester**

SPCH	1321	<u>Business and Professional Communication</u>
BIOM	2201	Safety in Health Care Facilities
BIOM	2315	Physiological Instruments I
BIOM	2343	General Medical Equipment II
ITNW	1358	Network+

Second Semester

ECON	1301	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
GEN ED		<u>Humanities/Fine Arts</u> course
BIOM	2319	Fundamentals of X-Ray and Medical Imaging Systems (Capstone)
BIOM	2331	Biomedical Clinical Instrumentation
BIOM	2337	Respiratory Equipment Maintenance

1. May substitute MATH 1316 or higher-level Math (recommended for transfer students)

BIOTECHNOLOGY**Program Options:****Certificate Level 1 – Biotechnology****Certificate Level 2 – Advanced Biotechnology**

Learn how to apply the biological sciences toward a career in biological or industrial research with the Biotechnology program at Collin College. Biotechnologists improve crops, help create life-saving medical procedures and search for alternative fuels in addition to hundreds of other scientific endeavors.

If you want to learn how to improve others' lives through biotechnology, Collin College's program is a great way to start. Study biology, biotechnology and genetics in route to a certificate preparing you for a career in biological research or industrial laboratory work.

Are you a returning student? You can also benefit from the new methods and technologies related to agriculture, medicine, pharmaceuticals and other applications.

Planning to transfer to a college or university? Be sure to consult an advisor about which biotechnology coursework is applicable to your intended college path before beginning the program.

Certificate Level 1 – Biotechnology

15 credit hours

First Semester

BIOL	1414	Introduction to Biotechnology I
BIOL	1415	Introduction to Biotechnology II
BITC	1340	Quality Assurance for the Biosciences

Second Semester

BITC	2486	Internship – Biology Technician/Biotechnology Laboratory Technician (Capstone) ¹
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1. May substitute BITC 2431 or BITC 2441

Certificate Level 2 – Advanced Biotechnology

34 credit hours

Students must be TSI complete.

First Semester

BIOL	1406	Biology for Science Majors I
BIOL	1414	Introduction to Biotechnology I

BIOL	1415	Introduction to Biotechnology II
MATH	1314	College Algebra

Second Semester (Summer)

BITC	1340	Quality Assurance for the Biosciences
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Third Semester

BIOL	2416	Genetics
BITC	2486	Internship – Biology Technician/Biotechnology Laboratory Technician (Capstone) ¹
BITC	2431	Cell Culture Techniques
CHEM	1411	General Chemistry I

1. May substitute BIOL 2389 or BITC 2441

BUSINESS MANAGEMENT**Program Options:****AAS – Business Management - Business Management****Certificate Level 1 – Business Management****Certificate Level 1 – Entrepreneurship**

Make the most out of a career in business with a business management certificate or degree from Collin College. Learn how to work in teams, solve problems, initiate change and relate to your coworkers.

In our Business Management program, you will study basic management philosophies and theories, organizational psychology, as well as business strategy development, implementation and evaluation skills. This degree is also excellent for people who wish to major in another field but need business and management skills. A certificate or degree in business management will put you in a great

position to climb the corporate ladder, no matter the organization.

Plan to transfer to a bachelor's degree program? Transfer agreements allow you to earn an Associate of Applied Science (AAS) degree in Business Management from Collin College and transfer to numerous universities in Texas where Collin College courses may be applied toward Bachelor of Applied Arts and Sciences (BAAS) and Bachelor of Applied Technology (BAT) degrees.

AAS – Business Management - Business Management

60 credit hours

There are two focus options in this degree – Business Management and Entrepreneurship, you must select ONE focus option and complete the courses in that option.

FIRST YEAR

First Semester

BMGT 1307	Team Building
BMGT 1327	Principles of Management
BMGT 1341	Business Ethics
<u>ENGL 1301</u>	<u>Composition I</u>
<u>MATH 1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)

Second Semester

BMGT 2303	Problem Solving and Decision Making
BMGT 2309	Leadership
HRPO 2307	Organizational Behavior
<u>ECON 1301</u>	<u>Introduction to Economics</u> ¹
<u>SPCH 1321</u>	<u>Business and Professional Communication</u> (See Speech options)

SECOND YEAR

First Semester

BMGT 1305	Communications in Management
BMGT 1344	Negotiations and Conflict Management
BUSG 2309	Small Business Management/ Entrepreneurship
HRPO 2301	Human Resources Management

Select One Focus Option:

Option 1: Business Management
IBUS 2341 Intercultural Management

Option 2: Entrepreneurship
BUSG 1304 Financial Literacy

Second Semester

BMGT 2311	Change Management
MRKG 1311	Principles of Marketing
<u>GEN ED</u>	<u>Humanities/Fine Arts</u> course

Select One Focus Option:

Option 1: Business Management
ACNT 1303 Introduction to Accounting I
BMGT 2341 Strategic Management (Capstone)

Option 2: Entrepreneurship
ACNT 1311 Introduction to Computerized Accounting
BUSG 1371 Business Plan for Funding (Capstone)

1. May substitute ECON 2301, ECON 2302 or PSYC 2301

Certificate Level 1 – Business Management

18 credit hours

First Semester

BMGT 1307	Team Building
BMGT 1327	Principles of Management
BMGT 1341	Business Ethics

Second Semester

BMGT 2303	Problem Solving and Decision Making
BMGT 2309	Leadership
HRPO 2307	Organizational Behavior (Capstone)

Certificate Level 1 – Entrepreneurship

18 credit hours

FIRST YEAR

First Semester

BUSG 2309	Small Business Management/ Entrepreneurship
MRKG 1311	Principles of Marketing
BUSG 1304	Financial Literacy

Second Semester

ACNT 1311	Introduction to Computerized Accounting
BUSG 1371	Business Plan for Funding (Capstone)
ELECTIVE *	

** Elective (3 credit hours): HRPO 2301, BMGT 2311, BMGT 1305, BMGT 1344*

BUSINESS OFFICE SUPPORT SYSTEMS

Department Website:

www.collin.edu/departments/boss

Program Options:

AAS – Business Office Support Systems
Certificate Level 1 – Administrative Support Specialist
Certificate Level 1 – Medical Office Support
Certificate Level 1 – Software Application Specialist

Learn the skills you need to thrive in an office environment with Collin College's Business Office Support Systems (BOSS) program. BOSS students learn skills like:

keyboarding by touch and improved speed and accuracy; workplace document formatting; word processing with Word; proofreading and editing; records and information management; business correspondence and communications; database management using Access; presentation and spreadsheet software using PowerPoint and Excel; office management; and manual and computerized office accounting.

You can apply those skills to careers like receptionist, bookkeeper, office manager, data entry clerk, administrative assistant, medical office assistant and more. Some of the courses required for this Associate of Applied Science (AAS) degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from Collin College to be applied toward the AAS degree in Business Office Support Systems.

AAS – Business Office Support Systems

60 credit hours

FIRST YEAR

First Semester

ACNT	1303	Introduction to Accounting I
POFT	1307	Proofreading and Editing
POFT	1319	Records and Information Management I
POFT	1329	Beginning Keyboarding

Second Semester

COSC	1301	Introduction to Computing ¹
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
POFI	2301	Word Processing – MS Word
POFT	2371	Strategies in Social Media

Third Semester

<u>HUMA</u>	<u>1301</u>	<u>Introduction to Humanities I</u> (See Humanities/Fine Arts options)
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

SECOND YEAR

First Semester

ACNT	1311	Introduction to Computerized Accounting
ITSC	1309	Integrated Software Applications I – MS Office
POFT	2331	Administrative Project Solutions
ELECTIVE	*	

Second Semester

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
ITSW	1304	Introduction to Spreadsheets – Excel
<u>MATH</u>	<u>1332</u>	<u>Contemporary Mathematics</u> (<u>Quantitative Reasoning</u>) (See Mathematics options)

ELECTIVE *

Third Semester

POFT	1349	Administrative Office Procedures II (Capstone)
POFT	2312	Business Correspondence and Communication

* *Elective (6 credit hours): BMGT 1341, BMGT 1344, HITT 1305, HITT 1311, HITT 1353, ITSW 1310, TRVM 2301, TRVM 1327, any POFT course, or any POFI course.*

1. May substitute BCIS 1305

Certificate Level 1 – Administrative Support Specialist

24 credit hours

FIRST YEAR

First Semester

BMGT	1341	Business Ethics
POFT	1307	Proofreading and Editing
POFT	2312	Business Correspondence and Communication
POFT	1319	Records and Information Management I

Second Semester

BCIS	1305	Business Computer Applications
BMGT	1344	Negotiations and Conflict Management
POFT	2331	Administrative Project Solutions (Capstone)
POFT	2371	Strategies in Social Media

Certificate Level 1 – Medical Office Support

30 credit hours

FIRST YEAR

First Semester

HITT	1305	Medical Terminology I
POFT	1307	Proofreading and Editing
POFT	1319	Records and Information Management I
POFT	1329	Beginning Keyboarding

Second Semester

HITT	1353	Legal and Ethical Aspects of Health Information
ITSC	1309	Integrated Software Applications I – MS Office
POFI	2301	Word Processing – MS Word
ELECTIVE	*	

Third Semester

POFT	1349	Administrative Office Procedures II (Capstone)
POFT	2312	Business Correspondence and Communication

* *Elective (3 credit hours): BMGT 1341, BMGT 1344, HITT 1311, HITT 1353, ITSW 1310, TRVM 2301, TRVM 1327, any POFT course, or any POFI course.*

Certificate Level 1 – Software Application Specialist

18 credit hours

FIRST YEAR

First Semester

ACNT	1303	Introduction to Accounting I
POFI	2301	Word Processing – MS Word
POFT	1329	Beginning Keyboarding

Second Semester

ACNT	1311	Introduction to Computerized Accounting
ITSC	1309	Integrated Software Applications I – MS Office (Capstone)
ITSW	1304	Introduction to Spreadsheet - Excel

CLOUD COMPUTING

Program Options:

AAS – Cloud Computing - Infrastructure

Certificate Level 1 – Cloud Computing - Cloud Infrastructure Technician

Certificate Level 1 – Cloud Computing - Infrastructure

Cloud computing is one of the most highly paid jobs in information technology (IT). The rate at which organizations are migrating to cloud computing on a global level is far larger than the rate at which professionals enter the field to execute the cloud migration and maintenance. Businesses recognize how cloud computing improves the efficiency and adaptability of IT resources, making it a great career opportunity for young professionals. The Collin College Cloud Computing-Infrastructure AAS Degree will help students become seasoned cloud computing specialists by preparing them for widely recognized cloud certifications, and allowing graduates to aim for roles like:

- Cloud Administrator
- Systems Engineer
- Pre-Sales Engineer
- Cloud Support Specialist
- Cloud Product Manager

The Cloud Computing-Infrastructure degree provides education and training for students interested in developing the knowledge, skills, and abilities necessary to serve as a cloud technology professional.

The Collin College Cloud Computing-Infrastructure degree will prepare students for an entry-level position or will augment existing IT professionals' skills in supporting leading cloud providers like Amazon Web Services (AWS) and Microsoft Azure. Additionally, the Computing degree program will immerse students in coursework, designed to prepare them for multiple industry certifications. For those

wanting to enter the workforce quickly, the program offers a Level I Certificate in Cloud Computing Infrastructure or jump right into the full Associate of Applied Science (AAS) degree in Cloud Computing in Infrastructure. Either way, results will come quickly with full-time enrollment. Upon completing the degree or certificate, students will possess the skills necessary to deploy and manage application workloads on enterprise customers' cloud platforms such as Amazon Web Services (AWS) and Microsoft Azure. Foundational topics included in the program include scripting languages, cloud storage, database technologies, cloud networking, and security concepts related to cloud computing. More advanced operational concepts covered in the program include serverless computing, cloud infrastructure automation, containerization, and the orchestration of containerized application workloads such as Docker, and Kubernetes.

AAS – Cloud Computing - Infrastructure

60 credit hours

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITNW	1309	Fundamentals of Cloud Computing

ITNW	1354	Implementing and Supporting Servers (Windows Server)
ITNW	1358	Network+

Second Semester

ITNW	1373	Cloud Storage and Database
ITNW	2375	VMware vSphere: Installation, Configuration, and Management
ITSC	1316	Linux Installation and Configuration
ITSE	1359	Introduction to Scripting Languages – Python
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

SECOND YEAR

First Semester

ITNW	1336	Cloud Deployment & Infrastructure Management
ITNW	1374	Cloud Computing Security
ITNW	1375	Cloud Administrator I
ITNW	2370	Containerization and Micro Services
<u>GEN ED</u>		<u>Mathematics/Natural Sciences</u> course

Second Semester

ITNW	1376	Cloud Administrator II (<i>First 8 weeks</i>)
ITNW	2327	Advanced Cloud Concepts (Capstone) (<i>Second 8 weeks</i>)
ITSC	1315	IT Project Management

GEN ED [Social/Behavioral Sciences](#) course
GEN ED [Speech](#) course

Certificate Level 1 – Cloud Computing - Cloud Infrastructure Technician

18 credit hours

FIRST YEAR

First Semester

ITNW 1309 Fundamentals of Cloud Computing
 ITNW 1354 Implementing and Supporting Servers
 (Windows Server)
 ITNW 1358 Network+

Second Semester

ITNW 1373 Cloud Storage and Database (Capstone)
 ITNW 2375 VMware vSphere: Installation,
 Configuration, and Management
 ITSE 1359 Introduction to Scripting
 Languages – Python

Certificate Level 1 – Cloud Computing - Infrastructure

42 credit hours

FIRST YEAR

First Semester

CPMT 1305 IT Essentials I: PC Hardware
 ITNW 1309 Fundamentals of Cloud Computing
 ITNW 1354 Implementing and Supporting Servers
 (Windows Server)
 ITNW 1358 Network+

Second Semester

ITNW 1373 Cloud Storage and Database
 ITNW 2375 VMware vSphere: Installation,
 Configuration, and Management
 ITSC 1316 Linux Installation and Configuration
 ITSE 1359 Introduction to Scripting
 Languages – Python

SECOND YEAR

First Semester

ITNW 1336 Cloud Deployment & Infrastructure
 Management
 ITNW 1374 Cloud Computing Security
 ITNW 1375 Cloud Administrator I
 ITNW 2370 Containerization and Micro Services

Second Semester

ITNW 1376 Cloud Administrator II (*First 8 weeks*)
 ITNW 2327 Advanced Cloud Concepts
 (Capstone) (*Second 8 weeks*)

COLLISION TECHNOLOGY

Program Options:

AAS – Collision Technology

**AAS – Collision Technology with Guided Work
 Experience**

**Occupational Skills Award (OSA) - Entry Level
 Collision
 Technician**

Certificate Level 1 - Collision Metal Technician

Certificate Level 1 - Collision Paint Technician

Certificate Level 2 - Collision Technology

The Collision Technology program is designed to prepare students for high-skill, high-demand positions in the collision industry. There are two AAS pathways that students can choose. The AAS with guided work experience allows students to reinforce what they have learned in the classroom and lab. Each semester, the student attends classes for 8 weeks and then works side-by-side with a mentor for 8 weeks. The other AAS pathway allows students to attend classes the entire semester. Completers will have opportunities in auto body shops with major dealerships, large collision repair chains as well as independent shops. In addition to earning marketable skills, stackable certificates, and an AAS degree, completers will earn multiple industry recognized I-CAR certifications and prepare for ASE certifications.

AAS – Collision Technology

60 credit hours

FIRST YEAR

First Semester

ABDR 1315 Vehicle Trim and Hardware
 ABDR 1331 Basic Refinishing
 ABDR 1349 Automotive Plastic and Sheet Molded
 Compound Repair
 ABDR 1455 Non-Structural Metal Repair

Second Semester

ABDR 1291 Current Trends in Collision Technology
 ABDR 1458 Intermediate Refinishing
 ABDR 2402 Auto Body Mechanical and Electrical
 Service

GEN ED [Mathematics/Natural Sciences](#) course

Third Semester

ENGL 1301 [Composition I](#)

GEN ED [Social/Behavioral Sciences](#) course

SECOND YEAR

First Semester

ABDR 1307 Collision Repair Welding
 ABDR 2347 Advanced Collision Repair Welding
 ABDR 2255 Collision Repair Estimating

ABDR 2280 Cooperative Education -
Autobody/Collision and Repair
Technology/Technician
GEN ED [Speech](#) course

Second Semester

ABDR 2437 Structural Analysis and Damage
Repair V
ABDR 2441 Major Collision Repair and Panel
Replacement
ABDR 2449 Advanced Refinishing
GEN ED [Humanities/Fine Arts](#) course

*Note: Completion of this degree gives eligibility for I-CAR
certification.*

AAS – Collision Technology with Guided Work Experience

60 credit hours

FIRST YEAR

First Semester

ABDR 1280 Cooperative Education -
Autobody/Collision and Repair
Technology/Technician
ABDR 1315 Vehicle Trim and Hardware
ABDR 1331 Basic Refinishing
ABDR 1455 Non-Structural Metal Repair
ENGL 1301 [Composition I](#)

Second Semester

ABDR 1349 Automotive Plastic and Sheet Molded
Compound Repair
ABDR 1458 Intermediate Refinishing
ABDR 1281 Cooperative Education -
Autobody/Collision and Repair
Technology/Technician
GEN ED [Mathematics/Natural Sciences](#) course

Third Semester

ABDR 2280 Cooperative Education -
Autobody/Collision and Repair
Technology/Technician
ABDR 1307 Collision Repair Welding
ABDR 2402 Auto Body Mechanical and Electrical
Service
GEN ED [Social/Behavioral Sciences](#) course

SECOND YEAR

First Semester

ABDR 2255 Collision Repair Estimating
ABDR 2281 Cooperative Education -
Autobody/Collision and Repair
Technology/Technician
ABDR 2347 Advanced Collision Repair Welding
GEN ED [Speech](#) course

Second Semester

ABDR 2441 Major Collision Repair and Panel
Replacement
ABDR 2449 Advanced Refinishing
GEN ED [Humanities/Fine Arts](#) course

*Note: Completion of this degree gives eligibility for I-CAR
certification.*

Occupational Skills Award (OSA) – Entry Level Collision Technician

13 credit hours

FIRST YEAR

First Semester

ABDR 1315 Vehicle Trim and Hardware
ABDR 1331 Basic Refinishing
ABDR 1349 Automotive Plastic and Sheet Molded
Compound Repair
ABDR 1455 Non-Structural Metal Repair

Certificate Level 1 - Collision Metal Technician

25 credit hours

FIRST YEAR

First Semester

ABDR 1307 Collision Repair Welding
ABDR 1315 Vehicle Trim and Hardware
ABDR 1455 Non-Structural Metal Repair
ABDR 2347 Advanced Collision Repair Welding

Second Semester

ABDR 2402 Auto Body Mechanical and Electrical
Service
ABDR 2437 Structural Analysis and Damage
Repair V
ABDR 2441 Major Collision Repair and Panel
Replacement (Capstone)

Certificate Level 1 - Collision Paint Technician

20 credit hours

FIRST YEAR

First Semester

ABDR 1315 Vehicle Trim and Hardware
ABDR 1331 Basic Refinishing
ABDR 1455 Non-Structural Metal Repair

Second Semester

ABDR 1291 Current Trends in Collision Technology
ABDR 1458 Intermediate Refinishing
ABDR 2449 Advanced Refinishing (Capstone)

Certificate Level 2 - Collision Technology

45 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

ABDR	1315	Vehicle Trim and Hardware
ABDR	1331	Basic Refinishing
ABDR	1349	Automotive Plastic and Sheet Molded Compound Repair
ABDR	1455	Non-Structural Metal Repair

Second Semester

ABDR	1291	Current Trends in Collision Technology
ABDR	1458	Intermediate Refinishing
ABDR	2402	Auto Body Mechanical and Electrical Service

SECOND YEAR

First Semester

ABDR	1307	Collision Repair Welding
ABDR	2347	Advanced Collision Repair Welding
ABDR	2255	Collision Repair Estimating
ABDR	2280	Cooperative Education - Autobody/Collision and Repair Technology/Technician

Second Semester

ABDR	2437	Structural Analysis and Damage Repair V
ABDR	2441	Major Collision Repair and Panel Replacement
ABDR	2449	Advanced Refinishing

Note: Completion of this certificate gives eligibility for I-CAR certification.

COMMUNICATION DESIGN

Department Website:

<http://www.collin.edu/department/communicationdesign/index.html>

Program Options:

AAS – Communication Design

- *Graphic Design Track*
- *User Experience Design Track*

Graphic Design Track

Certificate Level 1 – Graphic Design Foundations

Certificate Level 2 – Graphic Design

User Experience Design Track

Certificate Level 1 – User Experience Design Foundations

Certificate Level 2 – User Experience Design

Certificate Level 3 – ESC – Motion Graphics

Communication Design is an indispensable component of the way our world functions and does business—from traditional marketing and promotional materials, to phone apps and smart device interfaces, to package design and promotional material, to full scale brand identity design and advertising campaigns.

Collin's Communication Design program offers two areas of focus — Graphic Design and User Experience (UX) Design.

As a Graphic Designer, you will apply your artistic skills and knowledge as you shape visual messages to engage and communicate effectively with the intended audiences, helping the world communicate visually. The Graphic Design Track emphasizes strong concept development and production techniques, while exploring applications including logo design and brand identity, collateral design, advertising, packaging, promotion, and Web development.

As a User Experience Designer, you will apply your strategic skills and insights as you shape the way users interact with and experience products, systems and services, helping provide utility, support ease of use, and create efficiency. The User Experience Design Track emphasizes research, strategy, and design to develop and deliver effective user experiences, while preparing students to serve in UX roles across an increasing span of industries and applications, developing web sites, mobile applications, services, and products. Students planning to transfer to a college or university should check with a Collin College Career Coach or program Discipline Lead prior to beginning this program.

AAS – Communication Design – Graphic Design Track

60 credit hours

FIRST YEAR

First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTS	1316	Drawing I
ARTC	2311	History of Communication Graphics
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1317	Design Communication I
ARTC	1327	Typography
ARTC	1353	Computer Illustration I
<u>GEN ED</u>		<u>Mathematics/Natural Sciences</u> course

Third Semester

ARTV	1371	Storyboard and Concept Development
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

SECOND YEAR**First Semester**

ARTC	1313	Digital Publishing I
ARTC	2347	Design Communication II
FLMC	1331	Video Graphics and Visual Effects I
IMED	1316	Web Design I

Second Semester

ARTC	1349	Art Direction I
ARTC	2335	Portfolio Development for Graphic Design (Capstone)
<u>ARTS</u>	<u>1301</u>	<u>Art Appreciation</u> (See Humanities/Fine Arts options)
<u>GEN ED</u>		<u>Social/Behavioral Sciences</u> course

AAS – Communication Design - User Experience Design Track

60 credit hours

FIRST YEAR**First Semester**

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTC	2371	User Experience I
ARTS	1316	Drawing I
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1327	Typography
ARTC	1359	Visual Design for New Media
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)
UXUI	1370	Human Factors and Design Psychology

Third Semester

ARTV	1371	Storyboard and Concept Development
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)

SECOND YEAR**First Semester**

ARTC	1353	Computer Illustration I
ARTC	2311	History of Communication Graphics
IMED	1316	Web Design I
UXUI	1371	Prototyping and Usability Testing I

Second Semester

<u>ARTS</u>	<u>1301</u>	<u>Art Appreciation</u> (See Humanities/Fine Arts options)
FLMC	1331	Video Graphics and Visual Effects I
IMED	2311	Portfolio Development (Capstone)
<u>SPCH</u>	<u>1321</u>	<u>Business & Professional Communication</u> (See Speech options)

Graphic Design Track**Certificate Level 1 – Graphic Design Foundations**

24 credit hours

FIRST YEAR**First Semester**

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTC	2311	History of Communication Graphics
ARTS	1316	Drawing I

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1317	Design Communication I (Capstone)
ARTC	1327	Typography
ARTC	1353	Computer Illustration I

Certificate Level 2 – Graphic Design

39 credit hours

*Students must be TSI complete.***FIRST YEAR****First Semester**

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTC	2311	History of Communication Graphics
ARTS	1316	Drawing I

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1317	Design Communication I
ARTC	1327	Typography
ARTC	1353	Computer Illustration I

SECOND YEAR**First Semester**

IMED	1316	Web Design I
ARTC	1313	Digital Publishing I
ARTC	2347	Design Communication II

Second Semester

ARTC	1349	Art Direction I
ARTC	2335	Portfolio Development for Graphic Design (Capstone)

User Experience Design Track**Certificate Level 1 – User Experience Design Foundations**

18 credit hours

FIRST YEAR**First Semester**

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics

ARTC 2371 User Experience I

Second Semester

ARTC 1302 Digital Imaging I
 ARTC 1359 Visual Design for New Media
 (Capstone)
 UXUI 1370 Human Factors and Design Psychology

Certificate Level 2 – User Experience Design

42 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

ARTC 1305 Basic Graphic Design
 ARTC 1325 Introduction to Computer Graphics
 ARTC 2371 User Experience I
 PSYC 2301 General Psychology

Second Semester

ARTC 1302 Digital Imaging I
 ARTC 1327 Typography
 ARTC 1359 Visual Design for New Media
 UXUI 1370 Human Factors and Design Psychology

SECOND YEAR

First Semester

ARTC 1353 Computer Illustration I
 IMED 1316 Web Design I
 MATH 1342 Elementary Statistical Methods
 UXUI 1371 Prototyping and Usability Testing I

Second Semester

IMED 2311 Portfolio Development (Capstone)
 SPCH 1321 Business and Professional
 Communication

Certificate Level 3 – ESC – Motion Graphics

9 credit hours

Select only three courses.

ARTV 1345 3-D Modeling and Rendering I
 ARTV 1351 Digital Video
 FLMC 2331 Video Graphics and Visual Effects II
 ARTC 2381 Cooperative Education Commercial and
 Advertising Art

COMPUTER-AIDED DRAFTING AND DESIGN

Program Options:

**AAS – Computer-Aided Drafting and Design
 Occupational Skills Award (OSA) – AutoCAD**

**Certificate Level 1 – Computer-Aided Drafting and
 Design**

**Certificate Level 2 – Computer-Aided
 Drafting and Design**

High-tech industries are constantly creating new career opportunities in exciting, highly-specialized fields. A degree in Computer-Aided Drafting and Design (CADD) can provide you with both an educational foundation in computer-aided design and insight into current industry practices.

Get hands-on training in Collin College's intensive CADD program. Learn the skills a designer, CADD operator, architect or engineer needs for a successful career.

Students planning to transfer to a college or university should check with the Collin College academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Computer-Aided Drafting and Design

60 credit hours

FIRST YEAR

First Semester

DFTG 1302 Introduction to Technical Animation
 and Rendering
 DFTG 1309 Basic Computer-Aided Drafting
ENGL 1301 Composition I
MATH 1314 College Algebra
 (See [Mathematics/Natural Sciences](#)
 options)
SPCH 1321 Business and Professional
Communication (See [Speech](#) options)

Second Semester

DFTG 1315 Architectural Blueprint Reading
 DFTG 1372 SOLIDWORKS Essentials
 DFTG 2319 Intermediate Computer-Aided Drafting
 DFTG 2328 Architectural Drafting - Commercial
GEN ED [Social/Behavioral Sciences](#) course

SECOND YEAR

First Semester

DFTG 1317 Architectural Drafting - Residential
 DFTG 1333 Mechanical Drafting
 DFTG 2350 Geometric Dimensioning and
 Tolerancing
 DFTG 2373 Advanced SOLIDWORKS
GEN ED [Humanities/Fine Arts](#) course

Second Semester

ARCE	2352	Mechanical, Electrical, and Plumbing (MEP) Systems
BMGT	1305	Communications in Management
DFTG	1330	Civil Drafting I
DFTG	2332	Advanced Computer-Aided Drafting (Capstone)
DFTG	2381	Cooperative Education - Drafting and Design Technology/Technician, General ¹

1. May substitute DFTG 2338

Occupational Skills Award (OSA) – AutoCAD

9 credit hours

This program prepares students to design and draft in 2 dimensions and 3 dimensions. Also, students will be taught how to customize AutoCAD to enhance productivity.

Prerequisite: Basic computer skills. Having working knowledge of geometry will be a plus for students.

FIRST YEAR**First Semester**

DFTG	1302	Introduction to Technical Animation and Rendering
DFTG	1309	Basic Computer-Aided Drafting
DFTG	2319	Intermediate Computer-Aided Drafting

Note: Some of the courses in these award programs may require prerequisites. Please check the course descriptions.

Certificate Level 1 – Computer-Aided Drafting and Design

21 credit hours

FIRST YEAR**First Semester**

DFTG	1302	Introduction to Technical Animation and Rendering
DFTG	1309	Basic Computer-Aided Drafting
DFTG	2328	Architectural Drafting – Commercial

Second Semester

DFTG	1315	Architectural Blueprint Reading
DFTG	1317	Architectural Drafting - Residential
DFTG	1372	SOLIDWORKS Essentials
DFTG	2319	Intermediate Computer-Aided Drafting (Capstone)

Note: Upon successful completion of this certificate, students are eligible to take the Autodesk certification exams.

Certificate Level 2 – Computer-Aided Drafting and Design

45 credit hours

FIRST YEAR**First Semester**

DFTG	1302	Introduction to Technical Animation and Rendering
DFTG	1309	Basic Computer-Aided Drafting
DFTG	2328	Architectural Drafting – Commercial

Second Semester

BMGT	1305	Communications in Management
DFTG	1315	Architectural Blueprint Reading
DFTG	1372	SOLIDWORKS Essentials
DFTG	2319	Intermediate Computer-Aided Drafting

SECOND YEAR**First Semester**

DFTG	1317	Architectural Drafting – Residential
DFTG	1333	Mechanical Drafting
DFTG	2350	Geometric Dimensioning and Tolerancing
DFTG	2373	Advanced SOLIDWORKS

Second Semester

ARCE	2352	Mechanical, Electrical, and Plumbing (MEP) Systems
DFTG	1330	Civil Drafting I
DFTG	2332	Advanced Computer-Aided Drafting (Capstone)
DFTG	2381	Cooperative Education - Drafting and Design Technology/Technician, General ¹

1. May substitute DFTG 2338

COMPUTER NETWORKING**Program Options:****AAS – Computer Networking**

- *Integrated Networking Technologies Track*
- *Infrastructure Track (Routing and Switching)*
- *Systems Track*
- *Wireless Track*

Occupational Skills Award (OSA) – Entry-Level Network Support (Shared by all tracks)**Integrated Networking Technologies Track****Certificate Level 1 – Integrated Networking Cloud Technician****Certificate Level 1 – Integrated Networking Virtualization and Storage Technician****Certificate Level 2 – Integrated Networking Administrator**

Certificate Level 3 – ESC – Networking Systems Professional (CCNP)

(Shared by Integrated Networking Technologies and Systems Tracks)

Infrastructure Track

Certificate Level 1 – Infrastructure Technician (CCNA)

Certificate Level 1 – Wireless Infrastructure Technician

Certificate Level 2 – Infrastructure Administrator

Systems Track

Certificate Level 1 – Systems Software Technician

Certificate Level 1 – Systems Technician

Certificate Level 2 – Systems Administrator

Certificate Level 3 – ESC – Networking Systems Professional (CCNP)

(Shared by Integrated Networking Technologies and Systems Tracks)

Wireless Track

Certificate Level 1 – Wireless Track – Wireless Network Professional

Collin College’s computer networking program prepares graduates to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software. Courses and hands-on labs will prepare you for a variety of Cisco, CompTIA, VMware, EMC, CWNP, Linux and Python certification examinations. The computer networking program offers four study tracks: infrastructure, systems, integrated networking technologies, and wireless.

The Computer Networking – Infrastructure track prepares graduates to design and install secure network systems with a focus on managing network devices. Courses and hands-on labs in this track specifically prepare students for the CompTIA A+, CompTIA Network+, Cisco Certified Network Associate (CCNA) the Cisco Certified Network Professional (CCNP), and Certified Wireless Technician (CWT) professional certification exams.

The Computer Networking – Systems track prepares graduates to design and secure network systems with a focus on managing servers. Courses and hands-on labs in this track prepare students for the CompTIA A+, CompTIA Network+, Information Storage Management (EMC), Linux and Python certification examinations.

The Computer Networking – Integrated Networking Technologies track prepares graduates to design and secure network systems with a focus on cloud computing, storage and virtualization networking technologies. Courses and hands-on labs in this track prepare students for the broad spectrum of networking technologies and help ready them for the Cisco Certified CompTIA A+, CompTIA

Network+, Networking Associate (CCNA) and Certified Wireless Technician (CWT), as well as Information Storage Management (EMC) certification, among others.

The Computer Networking – Wireless track will prepare you to design and administer wireless networks. These skills with WLAN and IoT are highly needed in the industry. Courses and hands-on labs in this track prepare students for essential certifications. Courses and hands-on labs in this track prepare Associate students for the broad spectrum of networking technologies and help ready them for the CompTIA A+, CompTIA Network+, Cisco Certified Networking Associate (CCNA) and Certified Wireless Technician (CWT), Certified Wireless Network Administrator (CWNA), Certified Wireless Security Professional (CWSP), Certified Wireless Design Professional (CWDP), among others.

Students planning to transfer to a college or university should check with a Collin College academic advisor prior to beginning the program.

AAS – Computer Networking – Integrated Networking Technologies Track

60 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to Networks
ITNW	1309	Fundamentals Cloud Computing
<u>GEN ED</u>		Mathematics course

Second Semester

ITNW	1351	Fundamentals of Wireless LANs
ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITCC	2320	CCNA 3: Enterprise Networking, Security, and Automation (ENSA)
ITSC	1316	Linux Installation and Configuration
ITSC	1342	Shell Programming - Scripting

SECOND YEAR

First Semester

ITSY	2300	Operating System Security
<u>ENGL</u>	<u>1301</u>	Composition I
ITNW	1354	Implementing and Supporting Servers (Windows Server)
<u>SPCH</u>	<u>1321</u>	Business and Professional Communication (See Speech options)
ITSC	2325	Advanced Linux (Red Hat RH124)

Second Semester

ITNW 2373 Information Storage Management (EMC)

ITNW 2375 VMware vSphere: Installation, Configuration and Management (Capstone)

GEN ED [Humanities/Fine Arts](#) course

GEN ED [Social/Behavioral Sciences](#) course

ELECTIVE *

* *Elective (3 credit hours): ITSY 1300 (preferred), ITNW 1364 or any ITCC, ITMT, ITNW, or ITSY course not listed above.*

Note: ITCC 2320 (CCNA 3) – or the CCNA certification – is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

AAS – Computer Networking – Infrastructure Track (Routing and Switching)

60 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

CPMT 1305 IT Essentials I: PC Hardware and Software

ENGL 1301 [Composition I](#)

ITNW 1358 Network+

ITCC 1314 CCNA 1: Introduction to Networks

GEN ED [Mathematics](#) course

Second Semester

ITCC 1344 CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)

ITCC 2320 CCNA 3: Enterprise Networking, Security, and Automation (ENSA)

ITNW 1351 Fundamentals of Wireless LANs

ITNW 2375 VMware vSphere: Installation, Configuration and Management

ITSC 1342 Shell Programming - Scripting

Third Semester

GEN ED [Social/Behavioral Sciences](#) course

GEN ED [Humanities/Fine Arts](#) course

SECOND YEAR**First Semester**

ITCC 2330 CCNP Enterprise: Core Networking (ENCOR)

ITNW 1354 Implementing and Supporting Servers (Windows Server)

ITSY 2300 Operating Systems Security

SPCH 1321 [Business and Professional Communication](#) (See [Speech](#) options)

ELECTIVE *

Second Semester

ITCC 2335 CCNP Enterprise: Advanced Routing (ENARSI) (Capstone)

ITSC 1316 Linux Installation and Configuration

ITNW 1309 Fundamentals Cloud Computing

* *Elective (3 credit hours): ITMT 1371, ITNW 1364 or any ITCC, ITMT, ITNW, or ITSY course not listed above.*

Note: ITCC 2320 (CCNA 3) – or the CCNA certification – is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

AAS – Computer Networking – Systems Track

60 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

CPMT 1305 IT Essentials I: PC Hardware and Software

ITNW 1358 Network+

ITMT 1371 Configuring and Supporting Microsoft Windows 10 (MD-100)

ITCC 1314 CCNA 1: Introduction to Networks

GEN ED [Humanities/Fine Arts](#) course

Second Semester

ITCC 1344 CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)

ITNW 1354 Implementing and Supporting Servers (Windows Server)

ITSC 1316 Linux Installation and Configuration

ITNW 1309 Fundamentals of Cloud Computing

ITSY 1300 Fundamentals of Information Security

Third Semester

ENGL 1301 [Composition I](#)

GEN ED [Social/Behavioral Sciences](#) course

SECOND YEAR**First Semester**

ITSC 2325 Advanced Linux (Red Hat RH124)

ITSC 1342 Shell Programming - Scripting

SPCH 1321 [Business and Professional Communication](#) (See [Speech](#) options)

GEN ED [Mathematics](#) course

Second Semester

ITNW	2373	Information Storage Management (EMC)
ITNW	2375	VMware vSphere: Installation, Configuration, and Management (Capstone)
ITSY	2300	Operating System Security
ELECTIVE *		

* *Elective (3 credit hours): ITCC 2320, ITNW 1351, ITNW 1364 or any ITCC, ITMT, ITNW, or ITSY course not listed above.*

Note: ITCC 2320 (CCNA 3) – or the CCNA certification – is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

AAS – Computer Networking – Wireless Track

60 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

CPMT	1305	IT Essentials I: PC Hardware and Software
ITCC	1314	CCNA 1: Introduction to Networks
ITNW	1351	Fundamentals of Wireless LANs
ITNW	1358	Network+
ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)

Second Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>GEN ED</u>		<u>Mathematics</u> course
ITNW	1378	Wireless Network Administration
ITCC	2320	CCNA 3: Enterprise Networking, Security, and Automation (ENSA)
ITNW	2375	VMware vSphere: Installation, Configuration and Management

SECOND YEAR**First Semester**

ENGL	2311	Technical and Business Writing
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)
ITNW	2371	Wireless Network Security
ITSC	1342	Shell Programming - Scripting
ITSC	1316	Linux Installation and Configuration

Second Semester

ITNW	2372	Wireless Network Design
ITNW	2374	Emerging Wireless Technology (Capstone)
ITNW	1309	Fundamentals of Cloud Computing

GEN ED [Humanities/Fine Arts](#) course
GEN ED [Social/Behavioral Sciences](#) course

Occupational Skills Award (OSA) – Entry-Level Network Support

9 credit hours

Shared by all tracks

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC and ITSY courses are offered in eight-week express sessions.

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITSY	1300	Fundamentals of Information Security

Integrated Networking Technologies Track**Certificate Level 1 – Integrated Networking Technologies Track – Integrated Networking Cloud Technician**

21 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to Networks
ITNW	1351	Fundamentals of Wireless LANs

Second Semester

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSY	2300	Operating System Security (Capstone)
ITNW	1309	Fundamentals Cloud Computing

Certificate Level 1 – Integrated Networking Technologies Track – Integrated Networking Virtualization and Storage Technician

18 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

ITNW	1358	Network+
ITNW	1309	Fundamentals Cloud Computing
ITNW	1354	Implementing and Supporting Servers (Windows Server)

Second Semester

ITSC	1316	Linux Installation and Configuration
ITNW	2373	Information Storage Management (EMC)
ITNW	2375	VMware vSphere: Installation, Configuration and Management (Capstone)

Certificate Level 2 – Integrated Networking Technologies Track – Integrated Networking Administrator

45 Credit Hours

Students must be TSI complete.

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to Networks
ITNW	1309	Fundamentals Cloud Computing

Second Semester

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSY	2300	Operating System Security
ITNW	1354	Implementing and Supporting Servers (Windows Server)
ITCC	2320	CCNA 3: Enterprise Networking, Security, and Automation (ENSA)

SECOND YEAR**First Semester**

ITNW	1351	Fundamentals of Wireless LANs
ITSC	1316	Linux Installation and Configuration
ITSC	2325	Advanced Linux (Red Hat RH124)
ITSC	1342	Shell Programming – Scripting

Second Semester

ITNW	2373	Information Storage Management (EMC)
ITNW	2375	VMware vSphere: Installation, Configuration and Management (Capstone)

ELECTIVE *

* *Elective (3 credit hours): ITSY 1300 (preferred), or any ITCC, ITMT, ITNW, or ITSY course not listed above.*

Note: ITCC 2320 (CCNA 3) – or the CCNA certification – is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

Certificate Level 3 – ESC – Networking Systems Professional (CCNP)

Shared by Integrated Networking Technologies Track and Systems Track

6 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

ITCC	2330	CCNP Enterprise: Core Networking (ENCOR)
ITCC	2335	CCNP Enterprise: Advanced Routing (ENARSI)

Note: ITCC 2320 (CCNA 3) – or the CCNA certification – is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

Infrastructure Track

Certificate Level 1 – Infrastructure Track – Infrastructure Technician (CCNA)

18 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to Networks

Second Semester

ITSC	1342	Shell Programming - Scripting
ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITCC	2320	CCNA 3: Enterprise Networking, Security, and Automation (ENSA) (Capstone)

Certificate Level 1 – Infrastructure Track – Wireless Infrastructure Technician

21 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR**First Semester**

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+

ITCC	1314	CCNA 1: Introduction to Networks
ITMT	1371	Configuring and Supporting Microsoft Windows 10 (MD-100)

Second Semester

ITNW	1351	Fundamentals of Wireless LANs
ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSY	2300	Operating System Security (Capstone)

Certificate Level 2 – Infrastructure Track – Infrastructure Administrator

45 Credit Hours

Students must be TSI complete.

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to Networks
ITNW	1351	Fundamentals of Wireless LANs

Second Semester

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITCC	2320	CCNA 3: Enterprise Networking, Security, and Automation (ENSA)
ITNW	1309	Fundamentals Cloud Computing
ITSC	1342	Shell Programming - Scripting

SECOND YEAR

First Semester

ITCC	2330	CCNP Enterprise: Core Networking (ENCOR)
ITCC	2335	CCNP Enterprise: Advanced Routing (ENARSI)
ITNW	1354	Implementing and Supporting Servers (Windows Server)

Second Semester

ITSC	1316	Linux Installation and Configuration
ITNW	2375	VMware vSphere: Installation, Configuration and Management
ITSY	2300	Operating Systems Security (Capstone)
ELECTIVE *		

* *Elective (3 credit hours): ITMT 1371, or any ITCC, ITMT, ITNW, or ITSY course not listed in the degree plan.*

Note: ITCC 2320 (CCNA 3) -- or the CCNA certification - is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

Systems Track

Certificate Level 1 – Systems Track – Systems Software Technician

24 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

ITNW	1358	Network+
CPMT	1305	IT Essentials I: PC Hardware and Software
ITCC	1314	CCNA 1: Introduction to Networks
ITNW	1354	Implementing and Supporting Servers (Windows Server)

Second Semester

ITSC	1316	Linux Installation and Configuration (Capstone)
ITNW	1309	Fundamentals of Cloud Computing
ITSC	1342	Shell Programming - Scripting
ITSY	1300	Fundamentals of Information Security

Certificate Level 1 – Systems Track – Systems Technician

27 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITCC	1314	CCNA 1: Introduction to Networks
ITNW	1354	Implementing and Supporting Servers (Windows Server)
ITNW	1358	Network+
ITSC	1342	Shell Programming - Scripting

Second Semester

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSC	1316	Linux Installation and Configuration (Capstone)
ITNW	1309	Fundamentals of Cloud Computing
ITSY	1300	Fundamentals of Information Security

Certificate Level 2 – Systems Track – Systems Administrator

45 Credit Hours

Students must be TSI complete.

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITNW	1354	Implementing and Supporting Servers (Windows Server)
ITCC	1314	CCNA 1: Introduction to Networks

Second Semester

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSC	1316	Linux Installation and Configuration
ITSC	1342	Shell Programming - Scripting
ITSY	1300	Fundamentals of Information Security

SECOND YEAR

First Semester

ITMT	1371	Configuring and Supporting Microsoft Windows 10 (MD-100)
ITNW	1309	Fundamentals of Cloud Computing
ITSC	2325	Advanced Linux (Red Hat RH124)

Second Semester

ITNW	2373	Information Storage Management (EMC)
ITNW	2375	VMware vSphere: Installation, Configuration, and Management (Capstone)
ITSY	2300	Operating System Security
ELECTIVE *		

** Elective (3 credit hours): ITCC 2320, ITNW 1351, or any ITCC, ITMT, ITNW, or ITSY course not listed above.*

Note: ITCC 2320 (CCNA 3) – or the CCNA certification – is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

Certificate Level 3 – ESC – Networking Systems Professional (CCNP)

Shared by Integrated Networking Technologies Track and Systems Track

6 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

ITCC	2330	CCNP Enterprise: Core Networking (ENCOR)
ITCC	2335	CCNP Enterprise: Advanced Routing (ENARSI)

Note: ITCC 2320 (CCNA 3) – or the CCNA certification – is the prerequisite for the CCNP courses in the concurrent or postgraduate Enhanced Skills Certificate.

Wireless Track

Certificate Level 1 – Wireless Track - Wireless Network Professional

18 Credit Hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+

Second Semester

ITNW	1351	Fundamentals of Wireless LANs
ITNW	1378	Wireless Network Administration

Third Semester

ITNW	2371	Wireless Network Security
ITNW	2372	Wireless Network Design (Capstone)

COMPUTER SYSTEMS

Program Options:

AAS – Computer Systems

- *Computer Support Track*
- *Information Systems Track*

Occupational Skills Award (OSA) – Computer Applications

(Shared by all tracks)

Computer Support Track

Occupational Skills Award (OSA) – Help Desk Support

Certificate Level 1 – Help Desk/User Support Technician

Certificate Level 2 – Computer Support Specialist

Information Systems Track

Certificate Level 1 – Computer Applications Assistant

Certificate Level 1 – Information Systems Specialist

Certificate Level 2 – Computer Applications Specialist

Learn to design and develop information systems for the ever-growing world of computers with a degree or certificate in computer systems.

The rapid spread of computers and information technology has created a need for highly trained workers to work in applications, support and/or database development. With Collin College's Computer Systems program, you will learn to design and build computer systems, and to solve problems in this ever-changing and growing field.

The degree program offers tracks in information systems or computer support. Areas of study include business applications, business programming, management skills, database programming, computer applications and technical skills. The degree can provide a broad business background and professional skills needed to succeed in a career in computer information systems.

Computer support specialists troubleshoot and resolve various computer and software issues. They may work in a help-desk environment or provide technical support in an organization's IT department. Professionals might work in a variety of fields, including computer systems, telecommunications, finance, and educational services. Some professionals may be able to work from home, while others travel to clients' homes to provide computer support.

Information systems specialists troubleshoot computer systems and develop safeguards to prevent future problems. These experts design, repair, or administer an organization's computer networks and systems. Coursework in programming, computer applications, and

systems analysis and design prepare you for entry-level positions in Information Technology.

Students planning to transfer to a college or university should check with Collin College academic advisors or career coaches. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability. If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director, and check with your licensing/certifying entity, if any, to determine your status.

AAS – Computer Systems – Computer Support Track

60 credit hours

FIRST YEAR

First Semester

BCIS	1305	Business Computer Applications
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u>
		(See Social/Behavioral Sciences options)
ITSC	1305	Introduction to PC Operating Systems
<u>GEN ED</u>		<u>Mathematics</u> course

Second Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITSC	1315	IT Project Management
ITSW	1304	Introduction to Spreadsheets – Excel
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course
<u>GEN ED</u>		<u>Speech</u> course

SECOND YEAR

First Semester

ENGL	2311	Technical and Business Writing
ITNW	1358	Network+
ITSW	1307	Introduction to Database – Access
ITSW	1310	Introduction to Presentation Graphics Software
MRKG	1301	Customer Relationship Management ¹

Second Semester

ITMT	1371	Configuring and Supporting Microsoft Windows 10
ITSC	2339	Personal Computer Help Desk Support ²
ITSC	2380	Cooperative Education – Computer and Information Sciences, General (Capstone) ³
		Computer Support Technical Elective *
ITSY	1300	Fundamentals of Information Security

* *Computer Support Technical Elective: Any ITCC, ITMT, ITNW, ITSC, ITSE, or ITSY course not listed on Computer Support AAS/Certificate*

1. May substitute BMGT 1307, BMGT 1344, or BMGT 2303
2. ITSC 2339 is offered Spring semesters only
3. May substitute with INEW 2330

AAS – Computer Systems – Information Systems Track

60 credit hours

FIRST YEAR

First Semester

BCIS	1305	Business Computer Applications
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITSW	1310	Introduction to Presentation Graphics Software
<u>GEN ED</u>		Mathematics course

Second Semester

ITSC	1305	Introduction to PC Operating systems
ITSE	1311	Beginning Web Programming
ITSW	1304	Introduction to Spreadsheets – Excel
<u>GEN ED</u>		Humanities/Fine Arts course
<u>GEN ED</u>		Speech course

SECOND YEAR

First Semester

ITSE	1359	Introduction to Scripting Languages - Python
ENGL	2311	Technical and Business Writing
ITSC	1315	IT Project Management
ITNW	1358	Network+
ITSW	1307	Introduction to Database – Access

Second Semester

ITSC	2380	Cooperative Education – Computer and Information Sciences, General (Capstone) ¹
ITSE	2309	Database Programming – SQL
ITSY	1300	Fundamentals of Information Security
ITSE	1350	System Analysis and Design ²
BUSINESS ELECTIVE *		

* Business Elective (3 credit hours): BMGT 1307, BMGT 1344, BMGT 2303, or BUSI 1301

1. May substitute INEW 2330
2. May substitute with: GISC 1411, ITSE 1346, or ITSE 2302

Occupational Skills Award (OSA) – Computer Applications

9 credit hours

Shared by all tracks

FIRST YEAR

First Semester

ITSW	1304	Introduction to Spreadsheets – Excel
ITSW	1307	Introduction to Database – Access
ITSW	1310	Introduction to Presentation Graphics Software

Computer Support Track

Occupational Skills Award (OSA) – Help Desk Support

12 credit hours

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITSC	1305	Introduction to PC Operating Systems
ITSC	2339	Personal Computer Help Desk Support ¹

1. ITNW 1358 and ITSC 1305 are prerequisites for ITSC 2339, or consent of Associate Dean/Director; ITSC 2339 is offered Spring semesters only.

Certificate Level 1 – Help Desk/User Support Technician

24 credit hours

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITSC	1305	Introduction to PC Operating Systems
ITSW	1304	Introduction to Spreadsheets – Excel

Second Semester

ITSC	2339	Personal Computer Help Desk Support ¹ (Capstone)
ITSY	1300	Fundamentals of Information Security
ITSW	1310	Introduction to Presentation Graphics Software
ITSW	1307	Introduction to Database – Access

1. ITSC 2339 is offered Spring semesters only

Certificate Level 2 – Computer Support Specialist

30 credit hours

*Students must be TSI complete.***FIRST YEAR****First Semester (Summer)**

BCIS	1305	Business Computer Applications
ITSC	1305	Introduction to PC Operating Systems

Second Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITMT	1371	Configuring and Supporting Microsoft Windows 10
ITSC	1315	IT Project Management

Third Semester

ITSC	2380	Cooperative Education – Computer and Information Sciences, General (Capstone) ¹
ITSC	2339	Personal Computer Help Desk Support ²
ITSY	1300	Fundamentals of Information Security
MRKG	1301	Customer Relationship Management ³

*1. May substitute INEW 2330**2. ITSC 2339 is offered Spring semesters only**3. May substitute BMGT 1307, BMGT 1344, or BMGT 2303***Information Systems Track****Certificate Level 1 – Computer Applications****Assistant**

24 credit hours

FIRST YEAR**First Semester**

ITSC	1305	Introduction to PC Operating Systems
ITNW	1358	Network+
ITSW	1304	Introduction to Spreadsheets – Excel
ITSW	1310	Introduction to Presentation Graphics Software

Second Semester

ITSC	1315	IT Project Management (Capstone)
ITSW	1307	Introduction to Database – Access
ITSY	1300	Fundamentals of Information Security
BUSINESS ELECTIVE *		

** Business Elective (3 credit hours): BMGT 1307, BMGT 1344, BMGT 2303, or BUSI 1301***Certificate Level 1 – Information Systems Specialist**

30 credit hours

FIRST YEAR**First Semester**

ITSC	1305	Introduction to PC Operating systems
ITSE	1359	Introduction to Scripting Languages - Python
ITSW	1307	Introduction to Database – Access
ITNW	1358	Network+
ITSE	1311	Beginning Web Programming

Second Semester

ITSE	2309	Database Programming – SQL
ITSE	1350	System Analysis and Design ¹ (Capstone)
ITSC	1315	IT Project Management
ITSY	1300	Fundamentals of Information Security
BUSINESS ELECTIVE *		

** Business Elective (3 credit hours): BMGT 1307, BMGT 1344, BMGT 2303, or BUSI 1301**1. May substitute with: GISC 1411, ITSE 1346, or ITSE 2302***Certificate Level 2 – Computer Applications****Specialist**

30 credit hours

*Students must be TSI complete.***Third Semester**

BCIS	1305	Business Computer Applications
ITSC	1305	Introduction to PC Operating Systems

First Semester

ITNW	1358	Network+
ITSW	1304	Introduction to Spreadsheets - Excel
ITSW	1310	Introduction to Presentation Graphics Software
BUSINESS ELECTIVE *		

Second Semester

ITSC	1315	IT Project Management
ITSC	2380	Cooperative Education – Computer and Information Sciences, General (Capstone) ¹
ITSW	1307	Introduction to Database - Access
ITSY	1300	Fundamentals of Information Security

** Business Elective (3 credit hours): BMGT 1307, BMGT 1344, BMGT 2303, or BUSI 1301**1. May substitute INEW 2330*

CONSTRUCTION MANAGEMENT

Department Website:

[Construction Management](#)

Program Options:

AAS – Construction Management

Occupational Skills Award (OSA) – Construction Management

Certificate Level 1 – Residential or Commercial Construction Management

Certificate Level 2 – Construction Manager

Build a better tomorrow and be a leader in one of the fastest growing industries in Collin County with a degree in Construction Management from Collin College. North Texas is home to many of the fastest-growing cities in the United States and the need for skilled construction managers is more important than ever.

Construction managers use a blend of skills sets from the fields of architecture, business, and engineering to manage residential and commercial construction projects.

Construction managers oversee the planning, design and construction of a project from beginning to end, ensuring that projects are completed safely, on time, and on budget.

Collin College's Construction Management program prepares students to work in a wide variety of management/supervisory roles, both in residential and commercial areas of construction. Key topics include scheduling, budgeting, personnel management, quality assurance, and safety.

Many of the courses will include practical hands-on labs. The program also offers the opportunity for a summer cooperative work experience.

AAS – Construction Management

60 credit hours

FIRST YEAR**First Semester**

CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)
OSHT	1305	OSHA Regulations – Construction Industry

Second Semester

CNBT	2304	Construction Methods and Materials II
CNBT	1300	Residential and Light Commercial Construction Drawings
ENVR	1401	Environmental Science I ¹

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

Third Semester

CNBT	1280	Cooperative Education – Construction Engineering Technology/Technician
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SECOND YEAR**First Semester**

CNBT	1359	Project Scheduling
CNBT	1346	Construction Estimating I
CNBT	1342	Building Codes and Inspections
CNBT	2310	Commercial/Industrial Blueprint Reading
<u>PHIL</u>	<u>2306</u>	<u>Introduction to Ethics</u> ²

Second Semester

BMGT	1305	Communications in Management
CNBT	2340	Mechanical, Plumbing & Electrical Systems in Construction II (Commercial)
CNBT	1315	Field Engineering I
CNBT	2344	Construction Management II (Capstone)

1. *Can substitute any Life and Physical Sciences core component course, but course does not fulfill a core component for AAS degree plan.*

2. *No course substitutions*

Occupational Skills Award (OSA) – Construction Management

12 credit hours

CNBT	1311	Construction Materials and Methods I
CNBT	1300	Residential and Light Commercial Construction Drawings
CNBT	2342	Construction Management I
OSHT	1305	OSHA Regulations – Construction Industry

Certificate Level 1 – Residential or Commercial Construction Management

18 credit hours

FIRST YEAR**First Semester**

CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
OSHT	1305	OSHA Regulations – Construction Industry

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
CNBT	2304	Construction Methods and Materials II (Capstone)

Certificate Level 2 – Construction Manager

45 credit hours

*Students must be TSI complete.***FIRST YEAR****First Semester**

CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
OSHT	1305	OSHA Regulations – Construction Industry

Second Semester

CNBT	2304	Construction Methods and Materials II
ENVR	1401	Environmental Science I
CNBT	1300	Residential and Light Commercial Construction Drawings

Third Semester

CNBT	1280	Cooperative Education – Construction Engineering Technology/Technician
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SECOND YEAR**First Semester**

CNBT	1359	Project Scheduling
CNBT	1346	Construction Estimating I
CNBT	1342	Building Codes and Inspections
CNBT	2310	Commercial/Industrial Blueprint Reading

Second Semester

BMGT	1305	Communications in Management
CNBT	2340	Mechanical, Plumbing & Electrical Systems in Construction II (Commercial)
CNBT	1315	Field Engineering I
CNBT	2344	Construction Management II (Capstone)

CONSTRUCTION TECHNOLOGY - CARPENTRY**Department Website:**[Construction Technology - Carpentry](#)**AAS – Construction Technology - Carpentry****Certificate Level 1 – Construction Technology – Carpentry****Certificate Level 1 – Construction Technology – Carpentry Management****Certificate Level 2 – Construction Technology – Carpentry and Management**

The Construction Technology Carpentry program is designed to prepare students to enter the workforce at an entry level in carpentry by providing basics of the carpentry industry to prepare students for the carpentry workforce. This is accomplished through offering two types of Level 1 Certificates and a Level 2 Certificate. Additionally, the program is designed to align with the National Center for Construction Education and Research's (NCCER) Level 1 and Level 2 certifications. The program also provides the opportunity to complete an AAS that is specific to the construction industry for career advancement.

AAS – Construction Technology – Carpentry

60 credit hours

FIRST YEAR**First Semester**

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
<u>MATH</u>	<u>1324</u>	<u>Mathematics for Business and Social Sciences</u> (See Mathematics options)

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
CNBT	1318	Construction Tools and Techniques
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>HUMA</u>	<u>1301</u>	<u>Introduction to Humanities I</u> (See Humanities/Fine Arts options)

Third Semester

ELECTIVE *

SECOND YEAR**First Semester**

CRPT	1311	Roof Systems
CRPT	1315	Wall Systems
CRPT	1323	Floor Systems

CRPT	1325	Forms and Foundations I
SPCH	1321	<u>Business and Professional Communication</u> (See Speech options)

Second Semester

CNBT	1342	Building Codes and Inspections
CRPT	1341	Exterior Finish Systems
CRPT	1345	Interior Finish Systems
CRPT	1371	Advanced Carpentry Techniques (Capstone)

* *Elective (3 credit hours): ELPT 1371, HART 1371, OSHT 1307, or PFPB 1371*

Certificate Level 1 – Construction Technology – Carpentry

24 credit hours

FIRST YEAR**First Semester**

CNBT	1318	Construction Tools and Techniques
CRPT	1315	Wall Systems
CRPT	1323	Floor Systems
CRPT	1325	Forms and Foundations I

Second Semester

CNBT	1342	Building Codes and Inspections (Capstone)
CRPT	1311	Roof Systems
CRPT	1341	Exterior Finish Systems
CRPT	1345	Interior Finish Systems

Certificate Level 1 – Construction Technology – Carpentry Management

24 credit hours

FIRST YEAR**First Semester**

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
CNBT	1318	Construction Tools and Techniques

Third Semester

CRPT	1325	Forms and Foundations I
CRPT	1315	Wall Systems (Capstone)

Certificate Level 2 – Construction Technology – Carpentry and Management

45 credit hours

Students must be TSI complete.

FIRST YEAR**First Semester**

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
CNBT	1318	Construction Tools and Techniques

Third Semester

ELECTIVE *

SECOND YEAR**First Semester**

CRPT	1311	Roof Systems
CRPT	1315	Wall Systems
CRPT	1323	Floor Systems
CRPT	1325	Forms and Foundations I

Second Semester

CNBT	1342	Building Codes and Inspections
CRPT	1341	Exterior Finish Systems
CRPT	1345	Interior Finish Systems
CRPT	1371	Advanced Carpentry Techniques (Capstone)

* *Elective (3 credit hours): ELPT 1371, HART 1371, OSHT 1307, or PFPB 1371*

CONSTRUCTION TECHNOLOGY - ELECTRICAL

Department Website:

[Construction Technology - Electrical](#)

AAS – Construction Technology - Electrical
Certificate Level 1 – Construction Technology – Electrical
Certificate Level 1 – Construction Technology – Electrical Management
Certificate Level 2 – Construction Technology – Electrical and Management

The Construction Technology Electrical program is designed to prepare students to enter the State of Texas Apprentice program for Electricians by providing basics of the electrical wiring industry to prepare student for the electrical workforce. This is accomplished through offering two types of Level 1 Certificates and a Level 2 Certificate.

The program also provides the opportunity to complete an AAS that is specific to the construction industry for career advancement.

AAS – Construction Technology – Electrical

60 credit hours

FIRST YEAR

First Semester

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
<u>MATH</u>	<u>1324</u>	<u>Mathematics for Business and Social Sciences</u> (See Mathematics options)

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)
<u>HUMA</u>	<u>1301</u>	<u>Introduction to Humanities I</u> (See Humanities/Fine Arts options)

Third Semester

ELECTIVE *

SECOND YEAR

First Semester

ELPT	1311	Basic Electrical Theory
ELPT	1321	Introduction to Electrical Safety and Tools
ELPT	1325	National Electrical Code I
ELPT	1329	Residential Wiring
ELPT	1345	Commercial Wiring

Second Semester

ELPT	1357	Industrial Wiring
ELPT	1341	Motor Control
ELPT	2305	Motors and Transformers
ELPT	2325	National Electrical Code II (Capstone)

* *Elective (3 credit hours): HART 1371, OSHT 1307, or PFPB 1371*

Certificate Level 1 – Construction Technology – Electrical

24 credit hours

FIRST YEAR

First Semester

ELPT	1311	Basic Electrical Theory
ELPT	1321	Introduction to Electrical Safety and Tools

ELPT	1325	National Electrical Code I
ELPT	1329	Residential Wiring
ELPT	1345	Commercial Wiring

Second Semester

ELPT	1357	Industrial Wiring
ELPT	1341	Motor Control
ELPT	2305	Motors and Transformers (Capstone)

Certificate Level 1 – Construction Technology – Electrical Management

24 credit hours

FIRST YEAR

First Semester

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings

Third Semester

ELPT	1311	Basic Electrical Theory
ELPT	1321	Introduction to Electrical Safety and Tools
ELPT	1325	National Electrical Code I (Capstone)

Certificate Level 2 – Construction Technology – Electrical and Management

45 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings

Third Semester

ELECTIVE *

SECOND YEAR

First Semester

ELPT	1311	Basic Electrical Theory
ELPT	1321	Introduction to Electrical Safety and Tools

ELPT	1325	National Electrical Code I
ELPT	1329	Residential Wiring
ELPT	1345	Commercial Wiring

Second Semester

ELPT	1357	Industrial Wiring
ELPT	1341	Motor Control
ELPT	2305	Motors and Transformers
ELPT	2325	National Electrical Code II (Capstone)

* *Elective (3 credit hours): HART 1371, OSH 1307, or PFPB 1371*

CONSTRUCTION TECHNOLOGY - FACILITIES MANAGEMENT

Program Options:**AAS – Construction Technology – Facilities Management****Certificate Level 1 – Construction Technology – Facilities Management****Certificate Level 2 – Construction Technology – Facilities Management**

The Construction Technology Facilities Management program is designed to prepare students to enter the workforce at an entry level in the field of Facilities Management. The program provides both managerial and hands-on technical courses related to the area. The program has a Level 1 Certificate, a Level 2 Certificate, and Associate of Applied Science degree options.

AAS – Construction Technology – Facilities Management

60 credit hours

FIRST YEAR**First Semester**

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
ECON	1301	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
MATH	1324	<u>Mathematics for Business and Social Sciences</u> (See Mathematics options)

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
BMGT	1306	Facilities Management
ENGL	1301	<u>Composition I</u>
HUMA	1301	<u>Introduction to Humanities I</u> (See Humanities/Fine Arts options)

Third Semester

CNBT	2380	Cooperative Education - Construction Engineering Technology/Technician
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SECOND YEAR**First Semester**

BMGT	1301	Supervision
ELPT	1371	Electrical Fundamentals
HART	1371	HVAC Fundamentals
PFPB	1371	Plumbing Fundamentals
SPCH	1321	<u>Business and Professional Communication</u> (See Speech options)

Second Semester

BMGT	1309	Information and Project Management
BMGT	2303	Problem Solving and Decision Making
CNBT	2340	Mechanical, Plumbing & Electrical Systems in Construction II (Capstone)
HART	1303	Air Conditioning Control Principles

Certificate Level 1 – Construction Technology – Facilities Management

24 credit hours

FIRST YEAR**First Semester**

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
BMGT	1306	Facilities Management

Third Semester

ELPT	1371	Electrical Fundamentals ¹
BMGT	1301	Supervision (Capstone)

1. Or HART 1371 or PFPB 1371

Certificate Level 2 – Construction Technology – Facilities Management

45 credit hours

Students must be TSI complete.

FIRST YEAR**First Semester**

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
BMGT	1306	Facilities Management

Third Semester

CNBT	2380	Cooperative Education - Construction Engineering Technology/Technician
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SECOND YEAR**First Semester**

BMGT	1301	Supervision
ELPT	1371	Electrical Fundamentals
HART	1371	HVAC Fundamentals
PFPB	1371	Plumbing Fundamentals

Second Semester

BMGT	1309	Information and Project Management
BMGT	2303	Problem Solving and Decision Making
CNBT	2340	Mechanical, Plumbing & Electrical Systems in Construction II (Capstone)
HART	1303	Air Conditioning Control Principles

CONSTRUCTION TECHNOLOGY - PLUMBING**Department Website:**

[Construction Technology - Plumbing](#)

AAS – Construction Technology - Plumbing**Certificate Level 1 – Construction Technology – Plumbing****Certificate Level 1 – Construction Technology – Plumbing Management****Certificate Level 2 – Construction Technology – Plumbing and Management**

The Construction Technology Plumbing program is designed to prepare students to enter the workforce as an entry level plumber in the State of Texas Apprenticeship in Plumbing area by providing basics of plumbing, so they are productive much sooner than traditional transitions into the field. This is accomplished through offering two types of Level 1 Certificates and a Level 2 Certificate. The program also provides the opportunity to complete an AAS that is specific to the construction industry for career advancement.

AAS – Construction Technology – Plumbing

60 credit hours

FIRST YEAR**First Semester**

CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
ECON	1301	Introduction to Economics (See Social/Behavioral Sciences options)

MATH	1324	Mathematics for Business and Social Sciences (See Mathematics options)
OSHT	1305	OSHA Regulations – Construction Industry

Second Semester

BMGT	1305	Communications in Management
ENGL	1301	Composition I
HUMA	1301	Introduction to Humanities I (See Humanities/Fine Arts options)
PFPB	1306	Basic Blueprint Reading for Plumbers
PFPB	1321	Plumbing Maintenance and Repair

Third Semester

ELECTIVE *

SECOND YEAR**First Semester**

PFPB	1323	Plumbing Codes I
PFPB	1350	Plumbing and Pipefitting Equipment and Safety
PFPB	2309	Residential Construction Plumbing I
PFPB	2349	Field Measuring, Sketching, and Layout
SPCH	1321	Business and Professional Communication (See Speech options)

Second Semester

PFPB	1347	Backflow Prevention
PFPB	2308	Piping Standards and Materials
PFPB	2336	Commercial Construction and Fixture Setting
PFPB	2371	Advanced Plumbing Practices (Capstone)

* *Elective (3 credit hours): ELPT 1371, HART 1371, or OSHT 1307*

Certificate Level 1 – Construction Technology – Plumbing

24 credit hours

FIRST YEAR**First Semester**

PFPB	1321	Plumbing Maintenance and Repair
PFPB	1323	Plumbing Codes I
PFPB	1350	Plumbing and Pipefitting Equipment and Safety
PFPB	2349	Field Measuring, Sketching, and Layout

Second Semester

PFPB	1347	Backflow Prevention
PFPB	2308	Piping Standards and Materials (Capstone)
PFPB	2309	Residential Construction Plumbing I
PFPB	2336	Commercial Construction and Fixture Setting

Certificate Level 1 – Construction Technology – Plumbing Management

24 credit hours

FIRST YEAR

First Semester

CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
OSHT	1305	OSHA Regulations – Construction Industry

Second Semester

BMGT	1305	Communications in Management
PFPB	1306	Basic Blueprint Reading for Plumbers

Third Semester

PFPB	1321	Plumbing Maintenance and Repair
PFPB	1323	Plumbing Codes I (Capstone)
PFPB	1350	Plumbing and Pipefitting Equipment and Safety

Certificate Level 2 – Construction Technology – Plumbing and Management

45 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
OSHT	1305	OSHA Regulations – Construction Industry

Second Semester

BMGT	1305	Communications in Management
PFPB	1306	Basic Blueprint Reading for Plumbers
PFPB	1321	Plumbing Maintenance and Repair

Third Semester

ELECTIVE *

SECOND YEAR

First Semester

PFPB	1323	Plumbing Codes I
PFPB	1350	Plumbing and Pipefitting Equipment and Safety
PFPB	2309	Residential Construction Plumbing I
PFPB	2349	Field Measuring, Sketching, and Layout

Second Semester

PFPB	1347	Backflow Prevention
PFPB	2308	Piping Standards and Materials
PFPB	2336	Commercial Construction and Fixture Setting
PFPB	2371	Advanced Plumbing Practices (Capstone)

* *Elective (3 credit hours): ELPT 1371, HART 1371, or OSHT 1307*

CONSTRUCTION TECHNOLOGY - SAFETY

Department Website:

[Construction Technology - Safety](#)

AAS – Construction Technology - Safety

Certificate Level 1 – Construction Technology – Safety

Certificate Level 1 – Construction Technology – Safety Management

Certificate Level 2 – Construction Technology – Safety and Management

The Construction Technology Safety program is designed to prepare students to enter the workforce as an entry level construction Safety Officer by providing a wide variety of construction safety and management courses. This is accomplished through offering two types of Level 1 Certificates and a Level 2 Certificate and an AAS.

AAS – Construction Technology – Safety

60 credit hours

FIRST YEAR

First Semester

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
<u>MATH</u>	<u>1324</u>	<u>Mathematics for Business and Social Sciences</u> (See Mathematics options)

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
OSHT	1307	Construction Site Safety and Health
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>HUMA</u>	<u>1301</u>	<u>Introduction to Humanities I</u> (See Humanities/Fine Arts options)

Third Semester

ELECTIVE *

SECOND YEAR

First Semester

OSHT	2310	Principles of Safety Engineering
OSHT	1309	Physical Hazards Control
OSHT	1313	Accident Prevention, Inspection, and Investigation
OSHT	1316	Material Handling
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

Second Semester

OSHT	2309	Safety Program Management
OSHT	2337	Advanced Risk Management

OSHT	2320	Safety Training Presentation Techniques (Capstone)
OSHT	2380	Cooperative Education - Occupational Safety and Health Technology/Technician

* *Elective (3 credit hours): ELPT 1371, HART 1371, or PFPB 1371*

Certificate Level 1 – Construction Technology – Safety

24 credit hours

FIRST YEAR

First Semester

OSHT	1307	Construction Site Safety and Health
OSHT	1309	Physical Hazards Control
OSHT	1313	Accident Prevention, Inspection, and Investigation
OSHT	1316	Material Handling

Second Semester

OSHT	2309	Safety Program Management
OSHT	2310	Principles of Safety Engineering
OSHT	2337	Advanced Risk Management (Capstone)
OSHT	2380	Cooperative Education - Occupational Safety and Health Technology/Technician

Certificate Level 1 – Construction Technology – Safety Management

24 credit hours

FIRST YEAR

First Semester

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
OSHT	1307	Construction Site Safety and Health

Third Semester

OSHT	1309	Physical Hazards Control
OSHT	1313	Accident Prevention, Inspection, and Investigation (Capstone)

Certificate Level 2 – Construction Technology – Safety and Management

45 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

OSHT	1305	OSHA Regulations – Construction Industry
CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I

Second Semester

BMGT	1305	Communications in Management
CNBT	1300	Residential and Light Commercial Construction Drawings
OSHT	1307	Construction Site Safety and Health

Third Semester

ELECTIVE *

SECOND YEAR

First Semester

OSHT	1309	Physical Hazards Control
OSHT	1313	Accident Prevention, Inspection, and Investigation
OSHT	1316	Material Handling
OSHT	2310	Principles of Safety Engineering

Second Semester

OSHT	2309	Safety Program Management
OSHT	2337	Advanced Risk Management
OSHT	2320	Safety Training Presentation Techniques (Capstone)
OSHT	2380	Cooperative Education - Occupational Safety and Health Technology/Technician

* *Elective (3 credit hours): ELPT 1371, HART 1371, or PFPB 1371*

CULINARY ARTS

Also see [Pastry Arts](#).

Department Website:

<http://www.collin.edu/department/ihce/index.html>

Program Options:

AAS – Culinary Arts

Certificate Level 1 – Culinary Arts

Certificate Level 3 – ESC – Advanced Culinary Arts

Food is life, and you can learn to make life even more enjoyable with a certificate or degree from Collin College's Culinary Arts program.

A part of the college's Institute of Hospitality and Culinary Education (IHCE), Collin College's Culinary Arts program

will prepare you for a variety of food preparation positions and for career advancement in the food service industry. The program curriculum emphasizes a broad selection of hands-on food preparation courses, building on culinary foundation skills that will allow you to be effective in a commercial kitchen environment.

The curriculum is designed by industry experts and taught by experienced food service management professionals, and the program is fully accredited by the American Culinary Federation Education Foundation.

TRANSFER

Students planning to transfer to a college or university should check with a Collin College academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

ACCREDITATION

The Culinary Arts Program is fully accredited by the American Culinary Federation Education Foundation.

They may be contacted at:

180 Center Place Way
St. Augustine, FL 32095
800.624.9458

<http://www.acfchefs.org>

ADMISSION REQUIREMENTS

Students are required to attend mandatory Culinary Arts Orientation. Please visit the program website (<http://www.collin.edu/department/ihce/>) for dates and times.

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

AAS – Culinary Arts

60 credit hours

An American Culinary Federation (ACF) accredited program. Students will be eligible for Certified Culinarian (CC) upon graduation.

FIRST YEAR

First Semester

CHEF 1301 Basic Food Preparation
CHEF 1305 Sanitation and Safety ^{1,2}
CHEF 2331 Advanced Food Preparation

ENGL 1301 Composition I
HAMG 1321 Introduction to Hospitality Industry

Second Semester

CHEF 1341 American Regional Cuisine
CHEF 2302 Saucier
IFWA 1310 Nutrition and Menu Planning
RSTO 1325 Purchasing for Hospitality Operations
GEN ED Humanities/Fine Arts Course

Third Semester

MATH 1332 Contemporary Mathematics
(Quantitative Reasoning)
(See Mathematics options)
PSTR 1301 Fundamentals of Baking

SECOND YEAR

First Semester

CHEF 1310 Garde Manger
CHEF 1345 International Cuisine
HAMG 1324 Hospitality Human Resources
Management
GEN ED Social/Behavioral Sciences course

Second Semester

CHEF 1314 A La Carte Cooking (Capstone)
CHEF 2380 Cooperative Education – Culinary
Arts/Chef Training
RSTO 1304 Dining Room Service
SPCH 1321 Business and Professional
Communication (See Speech options)

1. *Certification in ServSafe*
2. *Certification in Food Protection Management*
Many courses are offered in eight-week express sessions.

Certificate Level 1 – Culinary Arts

24 credit hours

FIRST YEAR

First Semester

CHEF 1301 Basic Food Preparation
CHEF 1305 Sanitation and Safety ^{1,2}
CHEF 2331 Advanced Food Preparation
PSTR 1301 Fundamentals of Baking

Second Semester

CHEF 1310 Garde Manger (Capstone)
CHEF 1341 American Regional Cuisine
CHEF 2302 Saucier
IFWA 1310 Nutrition and Menu Planning

1. *Certification in ServSafe*
2. *Certification in Food Protection Management*
Many courses are offered in eight-week express sessions.

Certificate Level 3 – ESC – Advanced Culinary Arts

9 credit hours

FIRST YEAR

First Semester

IFWA 1319 Meat Identifying and Processing

Second Semester

CHEF 1302 Principles of Healthy Cuisine

CHEF 2336 Charcuterie (Capstone)

Many courses are offered in eight-week express sessions.

DATABASE DEVELOPMENT AND ADMINISTRATION

Program Options:

AAS – Database Development

Occupational Skills Award (OSA) – Database Concepts

Certificate Level 1 – Database Development Specialist

Databases play an important role in companies and organizations. A well designed and developed database supports effective and efficient daily operations in any industry. With the advent of eCommerce, enterprise resource planning, social media, and cloud computing, data-driven applications are in demand more than ever. With this demand comes a need for highly skilled database developers. Entry level database developer roles include:

- SQL Programmer
- Data Analyst
- Database Developer
- Data Engineer
- Web Data Developer
- Business Analyst
- Business Intelligence Analyst
- Application Database Developer

Collin College's Database Development program prepares graduates to plan, design, develop and manage database systems for a variety of businesses and organizations. All graduates will successfully complete courses and hands-on labs in the following areas:

- Database Concepts
- Database Theory and Design
- Database Programming using SQL
- Data Analytics

The AAS and certificate of the Database Development specialty will prepare students to plan, design and develop database systems and applications for various platforms: desktop, web, and cloud. Courses and hands-on labs prepare students to design and develop databases using

various SQL platforms for desktop, the web, and the cloud, including (but not limited to) MySQL, Oracle, Microsoft SQL Server.

AAS – Database Development

60 credit hours

FIRST YEAR

First Semester

COSC 1315 Introduction to Computer Programming¹

ITSE 1311 Beginning Web Programming

ITSE 1346 Database Theory and Design

ITSW 1304 Introduction to Spreadsheets – Excel

ITSW 1307 Introduction to Database - Access

Second Semester

ENGL 1301 Composition I

MATH 1342 Elementary Statistical Methods
(See [Mathematics](#) options)

ITNW 1358 Network+

ITSE 2309 Database Programming – SQL

ECON 1301 Introduction to Economics

(See [Social/Behavioral Sciences](#) options)

SECOND YEAR

First Semester

ITSE 1330 Introduction to C# Programming

ENGL 2311 Technical and Business Writing

ITSC 1315 IT Project Management

ITSE 2347 Advanced Database Programming

ITSY 1300 Fundamentals of Information Security

Second Semester

GEN ED Speech course

ITSC 2380 Cooperative Education – Computer and Information Sciences, General (Capstone)²

ITSE 2354 Advanced Oracle PL/SQL

GEN ED Humanities/Fine Arts course

ANALYTICS ELECTIVE *

*Analytics Elective * (3 credit hours): ITSE 2370, ITSW 2334, ITSE 1393, or ITSW 2370*

1. May substitute COSC 1436

2. May substitute INEW 2330

Occupational Skills Award (OSA) – Database Concepts

9 credit hours

FIRST YEAR

First Semester

ITSW 1304 Introduction to Spreadsheets - Excel

ITSW 1307 Introduction to Database - Access

ITSE 1346 Database Theory and Design

Certificate Level 1 – Database Development Specialist

21 credit hours

FIRST YEAR

First Semester (Summer)

COSC	1315	Introduction to Computer Programming ¹
ITSW	1307	Introduction to Database - Access

Second Semester

ITSE	1346	Database Theory and Design
ITSE	2309	Database Programming – SQL
ITSE	1330	Introduction to C# Programming

Third Semester

ITSC	1315	IT Project Management
ITSE	2347	Advanced Database Programming (Capstone)

1. May substitute COSC 1436

DENTAL HYGIENE

Department Website:

<http://www.collin.edu/dentalhygiene/>

Program Options:

AAS – Dental Hygiene

Dental hygienists do more than clean patients' teeth. Collin College's two-year dental hygiene program can teach you to perform clinical procedures, oral cancer screenings, dental nutritional counseling and identify potential health problems, as well as understand the physical and clinical aspects of treatment, so you can treat the whole patient.

The Dental Hygiene program is designed to prepare you to become a licensed health care professional who specializes in non-surgical periodontal therapy and oral health education. Use advanced technology like intraoral cameras and digital radiography, and gain hands-on training in the college's dental clinic, working with community members in search of low-cost dental care. The mix of the newest clinical technologies with a broad-based education in biological sciences, humanities and the dental sciences means you will be ready for work in private practice and community settings as a member of the dental health team.

Enrollment is limited and admission is competitive.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right

to request a criminal history evaluation letter from the applicable licensing agency.

Dental Hygiene students must meet eligibility requirements for licensure as established by the State Board of Dental Examiners (<http://www.tsbde.texas.gov/>) in the State of Texas. If a student has reason to believe he/she is ineligible for licensure, he/she should contact the Board regarding their specific concerns prior to entrance into the program.

A drug scan, background check and American Heart Association Basic Life Support CPR certification for health professionals will be required upon acceptance into the program. Requirements for dental hygiene licensure as set by the Texas State Board of Dental Examiners (TSBDE) defines that individuals be "of good moral character." All individuals accepted into the program must meet licensure eligibility requirements. Information received from the background check or drug scan may result in dismissal from the program.

The applicant must be in good health and emotionally stable and must furnish physical, dental and eye examination records. Forms will be provided by the dental hygiene department. In addition, the state of Texas requires the applicant to provide proof of all immunizations required by the state as defined in the Texas Administrative Code. *Other requirements include Hepatitis B vaccination and titer and annual TB testing, annual Flu vaccine, Varicella titer and TDap shot.

Applicants who believe they are at an increased risk of contracting an infectious disease should seek testing and counseling prior to making application to the Dental Hygiene Program. All students accepted into the program are expected to follow standard precautions and are financially responsible for any necessary testing/treatment resulting from an occupational incident and/or communicable disease exposure. No student is allowed to deliver patient care in any setting until he/she has mastered material on safety/standard precautions with satisfactory accuracy.

The student is awarded an AAS degree upon successful completion of the program. The graduate is eligible for national and regional examinations.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or

without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities/Core Performance Standards" documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION

Collin College's Dental Hygiene Program is accredited by the American Dental Association's Commission on Dental Accreditation (CODA) and has been granted the accreditation status of approval without reporting requirements. The council is a specialized accrediting body recognized by the Department of Education.

SPECIAL ADMISSION REQUIREMENTS

Admission to this program is selective. Admission to the college does not guarantee admission to the Dental Hygiene Program. Registration is by permission only. Information and applications may be obtained from the Dental Hygiene Program Director or dental hygiene website at <http://www.collin.edu/dentalhygiene/>.

- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a grade of "C" or better in all courses applicable to the Dental Hygiene program
- Submit official copies of all college transcripts
- Complete the HESI exam with satisfactory results
- Complete the health exam with a satisfactory result
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS)*.
- Submit a typed, one -page essay that discusses why dental hygiene has been selected as a profession
- Submit two reference forms: one from an employer and one from an educator
- Completion of an Observation Form: Observing of a dental office/Registered Dental Hygienist
- Completion of a personal interview with the Program Director and faculty

** It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, and a Hepatitis B titer is required, which can take up to 7 months to complete. All immunizations must be completed before the first clinical visit.*

AAS – Dental Hygiene

68 credit hours

Note: All science and mathematics courses that are part of the curriculum, but completed at an institutionally accredited college/university, must have been completed within five years of the Fall semester of the admission year in order to receive transfer credit.

PRE-ENTRANCE REQUIREMENTS

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> ¹
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors
CHEM	1405	Introduction to Chemistry I

FIRST YEAR

First Semester

DHYG	1201	Orofacial Anatomy, Histology and Embryology
DHYG	1304	Dental Radiology
DHYG	1431	Preclinical Dental Hygiene
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

Second Semester

DHYG	1207	General and Dental Nutrition
DHYG	1219	Dental Materials
DHYG	1227	Preventive Dental Hygiene Care
DHYG	1235	Pharmacology for the Dental Hygienist
DHYG	1261	Clinical I – Dental Hygienist
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> ¹

SECOND YEAR

First Semester

DHYG	1211	Periodontology
DHYG	1215	Community Dentistry
DHYG	1239	General and Oral Pathology
DHYG	2153	Dental Hygiene Practice
DHYG	2201	Dental Hygiene Care I
DHYG	2361	Clinical II – Dental Hygienist

Second Semester

DHYG	2102	Applied Community Dentistry
DHYG	2231	Dental Hygiene Care II (Capstone)
DHYG	2363	Clinical III – Dental Hygienist
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course
SOCI	1301	Introduction to Sociology

1. No course substitutions

DIAGNOSTIC MEDICAL SONOGRAPHY

Program Option:

AAS – Diagnostic Medical Sonography – Cardiac Track

AAS – Diagnostic Medical Sonography – General Track

Diagnostic imaging is one of the most commonly used technologies in the medical profession. With a degree in diagnostic medical sonography from Collin College, you can be part of a team that helps identify medical issues early enough to make a real difference in people's lives.

Collin College's Diagnostic Medical Sonography program is designed to prepare you to become a registered sonographer. Through our rigorous integrated didactic and clinical program, students graduate with the skills and knowledge required to be competent in sonography.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities/Core Performance Standards" documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION

The Collin College Diagnostic Medical Sonography – General Track (including Abdomen-Extended and Obstetrics & Gynecology) is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Joint Review Committee on Accreditation for Education in Diagnostic Medical Sonography (JRCEDMS). They may be contacted at:

Commission on Accreditation of Allied Health Education Programs
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Website: www.caahep.org

Joint Review Committee on Accreditation for Education in Diagnostic Medical Sonography
6021 University Boulevard, Suite 500
Ellicott City, MD 21043
Phone: (443) 973-3251
Website: www.jrcedms.org

Please note the Diagnostic Medical Sonography – Cardiac Track program is not accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

SPECIAL ADMISSION REQUIREMENTS

Admission to this program is selective. Admission to the college does not guarantee admission to the Diagnostic Medical Sonography Program. Registration is by permission only. Information and applications may be obtained online or from the Health Sciences and Emergency Services division office.

To apply, students must:

- Submit the required application form by the designated deadline.
- Application and acceptance into Collin College.
- Submit official copies of all college transcripts.
- Complete Collin College reading, writing and mathematics assessments.
- A grade of "C" or better must be earned in all DMSO specific courses (BIOL 2401 and 2402 must have been taken within the last five years before application)
- Complete HESI A2 Exam

** It is important to note that one of the required vaccinations, Hepatitis B, consists of a three-dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.*

Health Insurance – *All Sonography students are required to show proof of health insurance prior to starting clinical rotations each semester.*

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Students planning to transfer to a college or university should check with the Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Diagnostic Medical Sonography – Cardiac Track *

65 credit hours

PRE-PROGRAM REQUIREMENTS

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u>
<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u>
<u>DMSO</u>	<u>1210</u>	<u>Introduction to Sonography</u>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> (see Mathematics options)
<u>PHYS</u>	<u>1405</u>	<u>Elementary Physics I - Conceptual Physics</u> ¹

FIRST YEAR

First Semester (Fall)

<u>DSAE</u>	<u>1303</u>	<u>Introduction to Echocardiography</u>
<u>DSAE</u>	<u>1340</u>	<u>Diagnostic Electrocardiography</u>
<u>DSAE</u>	<u>2303</u>	<u>Cardiovascular Concepts</u>
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)

Second Semester (Spring)

<u>DMSO</u>	<u>1202</u>	<u>Basic Ultrasound Physics</u> (<i>First eight weeks</i>)
<u>DMSO</u>	<u>2243</u>	<u>Advanced Ultrasound Physics</u> (<i>Second eight weeks</i>)
<u>DSAE</u>	<u>2304</u>	<u>Echocardiographic Evaluation of Pathology I</u>
<u>DSPE</u>	<u>1200</u>	<u>Introduction to Pediatric Echocardiography Techniques</u>
<u>DSVT</u>	<u>1300</u>	<u>Principles of Vascular Technology</u>

Third Semester (Summer)

<u>DMSO</u>	<u>1167</u>	<u>Practicum 1 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician</u>
<u>DSAE</u>	<u>2235</u>	<u>Advanced Echocardiography</u>
<u>DSAE</u>	<u>2337</u>	<u>Echocardiographic Evaluation of Pathology II</u>
<u>DSVT</u>	<u>2200</u>	<u>Vascular Technology Applications</u>

SECOND YEAR

First Semester (Fall)

<u>DMSO</u>	<u>1466</u>	<u>Practicum 2 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician</u>
<u>GEN ED</u>		Humanities/Fine Arts course

Second Semester (Spring)

<u>DMSO</u>	<u>1366</u>	<u>Practicum 3 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician</u>
<u>DSAE</u>	<u>2355</u>	<u>Echocardiography Professionalism and Registry Review (Capstone)</u>

1. May substitute PHYS 1401 or PHYS 2425

*Please note the Diagnostic Medical Sonography – Cardiac Track program is not accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

AAS – Diagnostic Medical Sonography – General Track

65 credit hours

PRE-PROGRAM REQUIREMENTS

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u>
<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u>
<u>DMSO</u>	<u>1210</u>	<u>Introduction to Sonography</u>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> (see Mathematics options)
<u>PHYS</u>	<u>1405</u>	<u>Elementary Physics I - Conceptual Physics</u> ¹

FIRST YEAR

First Semester (Spring)

<u>DMSO</u>	<u>1202</u>	<u>Basic Ultrasound Physics</u>
<u>DMSO</u>	<u>1441</u>	<u>Abdominopelvic Sonography</u>
<u>DMSO</u>	<u>1455</u>	<u>Sonographic Pathophysiology</u>
<u>DMSO</u>	<u>2353</u>	<u>Sonography of Superficial Structures</u>
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)

Second Semester (Summer)

<u>DMSO</u>	<u>2243</u>	<u>Advanced Ultrasound Physics</u>
<u>DMSO</u>	<u>2405</u>	<u>Sonography of Obstetrics/Gynecology</u>
<u>DSVT</u>	<u>1300</u>	<u>Principles of Vascular Technology</u>

SECOND YEAR

First Semester (Fall)

<u>DMSO</u>	<u>1167</u>	<u>Practicum 1 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician</u>
<u>DMSO</u>	<u>1201</u>	<u>Techniques of Medical Sonography</u>
<u>DMSO</u>	<u>2342</u>	<u>Sonography of High Risk Obstetrics</u>
<u>DSVT</u>	<u>2200</u>	<u>Vascular Technology Applications</u>

Second Semester (Spring)

<u>DMSO</u>	<u>1466</u>	<u>Practicum 2 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician</u>
<u>GEN ED</u>		Humanities/Fine Arts course

Third Semester (Summer)

<u>DMSO</u>	<u>1366</u>	<u>Practicum 3 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician</u>
<u>DMSO</u>	<u>2230</u>	<u>Advanced Ultrasound and Review (Capstone)</u>

1. May substitute PHYS 1401 or PHYS 2425

EARLY CHILDHOOD EDUCATOR

Also see [Associate of Arts in Teaching \(AAT\)](#)

Program Options:

AAS – Early Childhood Educator (0-8 years)

Occupational Skills Award (OSA) – Early Childhood Administrator

Occupational Skills Award (OSA) – Child Development Associate (CDA)

Occupational Skills Award (OSA) – Special Educator (0-8 years)

Certificate Level 1 – Early Childhood Educator (0-8 years)

Certificate Level 1 – Child Development Associate (CDA)

Whether you want to be a teacher or just enjoy working with young children, the Early Childhood Educator program at Collin College could be the perfect starting point for you.

Early Childhood Educator certificate and degree programs are designed to prepare students to study at four-year universities and for entry-level positions working with young children and their families. The program emphasizes a developmental approach to promote the physical, social, emotional and cognitive growth of the children. Students acquire knowledge and skills that prepare them to create developmentally appropriate, nurturing environments.

The Child Development Associate (CDA) program provides performance-based training of childcare professionals who work with children from birth through age 8.

Occupational Skills Awards (OSA) are nine-hour awards that enhance students' marketability. These awards are also designed as a stepping stone toward earning certificates or the Associate of Applied Science in Early Childhood Education.

Coursework is applicable as in-service training for teachers, administrators, nannies and family day home providers. If you plan to transfer to a college or university, be sure to check with Collin College academic advisors and the degree requirements of the intended transfer college before beginning this program to verify course degree applicability. If you plan to obtain a bachelor's degree in Child Development, Texas Woman's University (TWU) accepts Collin College's AAS-Early Childhood Educator. Check with an advisor at TWU for more information. Additional colleges also accept Collin College courses in early childhood education; check with individual colleges for their requirements.

Program Requirements

1. Enroll in a Collin College child development course.
2. Within the first two weeks of their child development course, students must complete required paperwork to begin lab observations. A copy of a negative tuberculosis test result may be required. Continuing students may need to re-submit tuberculosis results every year.
3. Complete and sign a student record form as a contract to ensure the following:
 - Verification that the student has read and agrees to abide by the Texas Minimum Standards for childcare centers
 - Verification that the student has read and agrees to follow the laboratory student guidelines
 - Students must undergo and pass a criminal background history check by the Texas Department of Protective and Regulatory Services
 - Provide a notarized affidavit that confidentiality and professional discretion will be observed at all times
 - Personal release for videotaping for instructional purposes
 - Complete a Degree Plan (two-part document found on Collin College's website under Getting Started/Admissions/Forms or in the Admissions Office) and submit to an advisor.

It is the student's responsibility to keep all information current.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

AAS – Early Childhood Educator (0-8) years

60 credit hours

There are three focus options. You must select ONE focus and complete the three-course sequence.

FIRST YEAR

First Semester

CDEC	1319	Child Guidance
CDEC	1323	Observation and Assessment
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
TECA	1311	Educating Young Children
TECA	1354	Child Growth and Development

Second Semester

CDEC	1321	The Infant and Toddler
CDEC	1270	Introduction to Teaching ESL

EDUC 1300 Learning Framework
 TECA 1303 Families, School, and Community
 ELECTIVE 1 *

SECOND YEAR

First Semester

CDEC 1313 Curriculum Resources for Early
 Childhood Programs
 CDEC 1359 Children with Special Needs
 CDEC 2304 Child Abuse and Neglect
 CDEC 2371 Using Technology in the Classroom
 ELECTIVE 2 *

Second Semester

TECA 1318 Wellness of the Young Child
 CDEC 2166 Practicum – Child Care
 Provider/Assistant (Capstone)
GEN ED Humanities/Fine Arts course
GEN ED Mathematics/Natural Sciences course
GEN ED Social/Behavioral Sciences course
 ELECTIVE 3 *

* *ELECTIVE Sequences 1-3*

Child Development Associate (CDA) Focus

Elective 1
 CDEC 1317 Child Development Associate
 Training I
 Elective 2
 CDEC 2322 Child Development Associate
 Training II
 Elective 3
 CDEC 2324 Child Development Associate Training
 III

Administration Focus

Elective 1
 CDEC 2326 Administration of Programs for
 Children I
 Elective 2
 CDEC 2328 Administration of Programs for
 Children II
 Elective 3
 CDEC 2336 Administration of Programs for
 Children III

Early Childhood Educator Focus

Elective 1
 CDEC 2340 Instructional Technique for Children
 with Special Needs
 Elective 2
 CDEC 2307 Math and Science for Early Childhood
 OR
 CDEC 1358 Creative Arts for Early Childhood
 Elective 3
 CDEC 1385 Cooperative Education – Child
 Development

Occupational Skills Award (OSA) – Early Childhood Administrator

9 credit hours

CDEC 2326 Administration of Programs for
 Children I
 CDEC 2328 Administration of Programs for
 Children II
 CDEC 2336 Administration of Programs for
 Children III

Occupational Skills Award (OSA) – Child Development Associate (CDA)

9 credit hours

CDEC 1317 Child Development Associate Training I
 CDEC 2322 Child Development Associate
 Training II
 CDEC 2324 Child Development Associate
 Training III

Occupational Skills Award (OSA) – Special Educator (0-8 Years)

9 credit hours

TECA 1354 Child Growth and Development
 CDEC 1359 Children with Special Needs
 CDEC 2340 Instructional Techniques for Children
 with Special Needs

Certificate Level 1 – Child Development Associate (CDA)

16 credit hours

CDEC 1317 Child Development Associate Training I
 CDEC 2322 Child Development Associate Training II
 CDEC 2324 Child Development Associate Training III
 TECA 1318 Wellness of the Young Child
 TECA 1354 Child Growth and Development
 CDEC 2166 Practicum – Child Care/Assistant
 (Capstone)

Certificate Level 1 – Early Childhood Educator (0-8 Years)

39 credit hours

*(This certificate covers Special Education from Infancy through the
 School-Age child.)*

First Year

First Semester

CDEC 1319 Child Guidance
 CDEC 1321 The Infant and Toddler
 CDEC 1323 Observation and Assessment
 CDEC 1359 Children with Special Needs
 TECA 1311 Educating Young Children

Second Semester

CDEC	1270	Introduction to Teaching ESL
TECA	1303	Families, School, and Community
TECA	1354	Child Growth and Development
CDEC	1313	Curriculum Resources for Early Childhood Programs
TECA	1318	Wellness of the Young Child

Third Semester

CDEC	2166	Practicum – Child Care Provider/Assistant (Capstone)
CDEC	2304	Child Abuse and Neglect
CDEC	2340	Instructional Techniques for Children with Special Needs
CDEC	2371	Using Technology in the Classroom

ELECTRONIC ENGINEERING TECHNOLOGY**Program Options:****AAS – Electronic Engineering Technology****Certificate Level 1 – Electronic Engineering Technology****Certificate Level 2 – Electronic Engineering Technology**

Take your knowledge of electronics to a deeper level in the Electronic Engineering Technology program at Collin College. This program emphasizes the application of mathematical theorems and applied physics in the design and analysis of electronic circuits. You will learn classroom theory and perform hands-on laboratory design and analysis experiments.

The program curriculum and laboratory equipment have been formally evaluated and endorsed by an advisory committee consisting of members of the electronics industry, so you can be sure you are learning the skills you will need to earn a job once you graduate college.

Collin College offers an Associate of Applied Science, a Level 1 Certificate, and a Level 2 Certificate in Electronic Engineering Technology. Students may also transfer their completed program toward a bachelor's degree into several colleges and universities.

AAS – Electronic Engineering Technology

60 credit hours

FIRST YEAR**First Semester**

CETT	1307	Fundamentals of Electronics
CETT	1425	Digital Fundamentals
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ENTC	1171	Introduction to Engineering Technology
TECM	1343	Technical Algebra and Trigonometry ¹

Second Semester

CETT	1409	DC-AC Circuits
CETT	1445	Microprocessor
RBTC	1405	Robotic Fundamentals
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Third Semester

<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See <u>Speech</u> options)
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SECOND YEAR**First Semester**

CETT	2471	Emerging Topics in Engineering Technology
INTC	1307	Instrumentation Test Equipment
<u>PHYS</u>	<u>1405</u>	<u>Elementary Physics I - Conceptual Physics</u> (See <u>Natural Sciences</u> options)

ELECTIVE *

Second Semester

CETT	1457	Linear Integrated Circuits
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See <u>Social/Behavioral Sciences</u> options)
EECT	2439	Communications Circuits (Capstone)

ELECTIVE *

* *Electives (6 credit hours): DFTG 1372, EECT 2380, ELMT 1305, RBTC 2345, or SUAS 1371*

1. *May substitute MATH 1316 or higher-level math (recommended for transfer students)*

Certificate Level 1 – Electronic Engineering Technology

23 credit hours

FIRST YEAR**First Semester**

CETT	1307	Fundamentals of Electronics
CETT	1425	Digital Fundamentals
ENTC	1171	Introduction to Engineering Technology
TECM	1343	Technical Algebra and Trigonometry ¹

Second Semester

CETT	1409	DC-AC Circuits
CETT	1445	Microprocessor (Capstone)
RBTC	1405	Robotic Fundamentals

1. *May substitute MATH 1316 or higher-level math (recommended for transfer students)*

Certificate Level 2 – Electronic Engineering Technology

44 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

CETT	1307	Fundamentals of Electronics
CETT	1425	Digital Fundamentals
ENTC	1171	Introduction to Engineering Technology
TECM	1343	Technical Algebra and Trigonometry ¹

Second Semester

CETT	1409	DC-AC Circuits
CETT	1445	Microprocessor
RBTC	1405	Robotic Fundamentals

SECOND YEAR

First Semester

CETT	2471	Emerging Topics in Engineering Technology
INTC	1307	Instrumentation Test Equipment
ELECTIVE	*	

Second Semester

CETT	1457	Linear Integrated Circuits
EECT	2439	Communications Circuits (Capstone)
ELECTIVE	*	

* *Electives (6 credit hours): DFTG 1372, EECT 2380, ELMT 1305, RBTC 2345, or SUAS 1371*

1. May substitute MATH 1316 or higher-level math (recommended for transfer students)

EMERGENCY MEDICAL SERVICES PROFESSIONS

Department Website:

<https://www.collin.edu/department/ems/>

Program Options:

**AAS – Emergency Medical Services Professions
Occupational Skills Award (OSA) – Emergency
Medical Services
Professions**

Certificate Level 1 – Paramedic

Emergency medical personnel are on the front lines of medicine, providing patients in need with life-saving care. Be a part of that mission with a degree, certificate or award in Emergency Medical Services Professions. Collin College's Emergency Medical Services Professions program will provide you with a foundation for careers in emergency medicine and other related health care fields.

This program has three options: The OSA – Emergency Medical Services Professions prepares students for entry-

level positions as an Emergency Medical Technician. Students completing the Certificate – EMS Paramedic are well positioned for higher paying jobs. Completion of the AAS – Emergency Medical Services Professions degree will benefit students seeking promotion in the EMS field.

This program prepares students for skills proficiency verification by the training program medical director; and written and practical exam administered by National Registry. A licensed paramedic has an associate degree (or higher) and tests on the same skills for EMT-Paramedic.

Learn more at the webpage above or contact the EMS office at 972.548.6530.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Once a student successfully completes requirements for the National Registry, he or she may become certified by the Texas Department of State Health Services EMS Division. Both levels of certification require periodic and specific recertification hours and activities to continue to practice as an emergency medical technician.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

ACCREDITATION

The Collin College Emergency Medical Technician – Paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs (<http://www.caahep.org>) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). They may be contacted at:

9355 - 113th St. N, #7709

Seminole, FL 33775

727.210.2350

<http://www.caahep.org>

FUNCTIONAL ABILITIES/CORE

PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities – some are without accommodations – for admission and/or successful completion of the program. The specific functional requirements are found in Functional Abilities/Core Performance Standards documents provided in the program information and application packets. Students

who think they may not be able to meet the functional standards and need accommodations are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

ADMISSION REQUIREMENTS

Admission to this program is selective. Admission to the college does not guarantee admission to the Emergency Medical Services Program. Registration is by permission only. Information and applications may be obtained from the Program Director, the EMS Office, or the EMS website at <https://www.collin.edu/departments/ems/>

- Provide proof of high school graduation or GED
- 18 years of age
- Complete the “Accuplacer EMT / Fire Science / Paramedic Assessments” at one of the Testing Centers listed [here](#).
- Complete program application and attach Accuplacer results
- Personal interview
- Drug test
- Criminal history check
- Complete immunizations required by the Texas Department of State Health Services (TDSHS). *
- Applicant must be in academic good standing with a 2.0 or higher GPA

* *It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.*

Health Insurance – All Emergency Medical Services students are required to show proof of health insurance prior to starting clinical rotations each semester.

AAS – Emergency Medical Services Professions or Certificate – EMS Paramedic (Paramedic Students)

Additional Admission Requirements:

- Texas Department of State Health Services or National Registry EMT – Basic Certification
- Take the PSB exam that includes academic aptitude, spelling, reading comprehension, natural science and vocational adjustment.

AAS – Emergency Medical Services Professions

60 credit hours

A student who has the EMT – Basic certification has met the first three EMSP course requirements. ¹

PRE-PROGRAM REQUIREMENTS

EMSP 1160 Clinical – Emergency Medical Technician (EMT Paramedic) – Basic ¹

EMSP 1371 Introduction to Emergency Medical Technician (EMT) ¹
 EMSP 1501 Emergency Medical Technician ¹
 ENGL 1301 Composition I

FIRST YEAR

First Semester

BIOL 2401 Anatomy and Physiology I ²
 EMSP 1338 Introduction to Advanced Practice
 EMSP 1356 Patient Assessment and Airway Management
 EMSP 2206 Emergency Pharmacology
 KINE 1100 Beginning Weight Training
 (See [Kinesiology](#) options)

Second Semester

BIOL 2402 Anatomy and Physiology II ²
 EMSP 1161 Clinical – Emergency Medical Technician (EMT Paramedic) – Advanced I
 EMSP 2534 Medical Emergencies
 EMSP 2544 Cardiology

Third Semester

EMSP 1162 Clinical – Emergency Medical Technician (EMT Paramedic) – Advanced II
 EMSP 1355 Trauma Management

SECOND YEAR

First Semester

EMSP 2160 Clinical – Emergency Medical Technician (EMT Paramedic) – Advanced III
 EMSP 2305 EMS Operations
 EMSP 2330 Special Populations
 GEN ED [Humanities/Fine Arts](#) course
 GEN ED [Social/Behavioral Sciences](#) course

Second Semester

EMSP 2143 Assessment Based Management (Capstone)
 EMSP 2267 Practicum – Emergency Medical Technician (EMT Paramedic)

1. *A Student that has the EMT – Basic certification has met this requirement*

2. *No substitutions*

Occupational Skills Award (OSA) – Emergency Medical Services Professions

9 credit hours

A student who has the EMT – Basic certification has met these EMSP requirements.

EMSP	1160	Clinical – Emergency Medical Technician (EMT Paramedic) – Basic
EMSP	1371	Introduction to Emergency Medical Technician (EMT)
EMSP	1501	Emergency Medical Technician

Certificate Level 1 – Paramedic

42 credit hours

PRE-PROGRAM REQUIREMENTS

A student who has the EMT – Basic certification has met the first three EMSP course requirements.¹

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) – Basic ¹
EMSP	1371	Introduction to Emergency Medical Technician (EMT) ¹
EMSP	1501	Emergency Medical Technician ¹

FIRST YEAR

First Semester

EMSP	1338	Introduction to Advanced Practice
EMSP	1356	Patient Assessment and Airway Management
EMSP	2206	Emergency Pharmacology

Second Semester

EMSP	1161	Clinical – Emergency Medical Technician (EMT Paramedic) – Advanced I
EMSP	1355	Trauma Management
EMSP	2305	EMS Operations

Third Semester

EMSP	2544	Cardiology
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SECOND YEAR

First Semester

EMSP	1162	Clinical – Emergency Medical Technician (EMT Paramedic) – Advanced II
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Second Semester

EMSP	2160	Clinical – Emergency Medical Technician (EMT Paramedic) – Advanced III
EMSP	2330	Special Populations
EMSP	2534	Medical Emergencies

Third Semester

EMSP	2143	Assessment Based Management (Capstone)
EMSP	2267	Practicum – Emergency Medical Technician (EMT Paramedic)

1. A student that has the EMT – Basic certification has met this requirement.

FIRE ACADEMY / FIRE SCIENCE

Department Website:

<http://www.collin.edu/firescience>

Program Options:

AAS – Fire Science

Occupational Skills Award (OSA) – Fire Officer Candidate

Certificate Level 1 – Basic Firefighter

Certificate Level 1 – Fire Officer

There is nothing more regarding than being able to take pride in your work. As a graduate of Collin College's Fire Academy program, you will be ready when the alarm sounds, your instincts kick in and life goes from zero to 100 in a matter of seconds. You can be proud that you help others, responding to high-stress situations – saving lives and property.

Fire Academy

Collin College's Fire Academy is one of the most highly regarded programs in the state. Fire Academy graduates from Collin College can be found throughout Texas – all of them making a difference in their communities. This certification program was developed to prepare you for a career as a professional firefighter and includes Emergency Medical Technician (EMT) training for state certification. Many fire departments require applicants to complete basic firefighter training before they take a fire department entrance exam.

Collin College's Fire Academy meets the curriculum requirements for certification as a basic firefighter for the state of Texas and was developed to prepare students for a career as a professional firefighter. The program is offered on both full-time (one semester) and part-time (two semesters) schedules. Students are required to complete Emergency Medical technician (EMT-B) training either before or after completing fire training. Credits earned in the Fire Academy can be applied to the AAS – Basic Firefighter degree plan to help jumpstart a rewarding career in the fire service.

Firefighters with a well-balanced educational background will be better prepared to serve their communities. Collin College's Fire Science program is designed to give you the certifications and experience necessary for effective decision-making and leadership skills in the fire department. You will receive technical knowledge needed

to combat the fire problems created by modern living and develop leadership skills required of a Fire Officer.

This certification program was developed to prepare you for a career as a professional fire officer and includes multiple state certifications often required by fire departments for promotion to leadership ranks.

Fire Science

Collin College's Fire Science program meets the curriculum requirements for several certifications including: Fire Instructor I, II; and Fire Officer I, II. The certification courses are offered on-line, while other courses are offered face-to-face for optimal skill practice and application. Credits earned in the Fire Officer certificate program can be applied to the AAS – Fire Officer Certification degree plan to meet promotional requirements in area fire departments.

Some courses require a permit for registration. Permits are granted by contacting the Fire Science Office at 972-548-6836.

Collin College's Fire Academy program is approved by the Texas Commission on Fire Commission, Certified Training Facilities.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities – some are without accommodations – for admission and/or successful completion of the program. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

ADDITIONAL ADMISSIONS REQUIREMENTS FOR FIREFIGHTER CERTIFICATION COURSES:

- 18 years of age
- Provide proof of high school graduation or GED
- Complete Collin College application
- Complete program application
- Complete Accuplacer – Next Generation Reading test (minimum score – 250)
- Complete Accuplacer – Next Generation Arithmetic test (minimum score – 250)
- Complete WritePlacer test (Minimum score 4)
- Complete the physical ability exam and personal interview scheduled through the Program Director
- Criminal history check

- Applicant must be in academic good standing with a 2.0 or higher GPA

Registration is by permission only. Additional information may be obtained from the Fire Science Office located at the Public Safety Training Center at 3600 Redbud Blvd, McKinney, Texas 75069 or at the Fire Science website: <http://www.collin.edu/firescience>.

AAS – Fire Science

60 credit hours

There are two focus options in this degree, you must select ONE focus option and complete the courses in that option.

Focus Option 1: Basic Firefighter Certification (BFC)

Focus Option 2: Fire Officer Certification (FOC)

FIRST YEAR

First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>GOVT</u>	<u>2306</u>	<u>Texas Government (Texas Constitution and Topics)</u> ¹
<u>HUMA</u>	<u>1301</u>	<u>Introduction to Humanities</u> (See Humanities/Fine Arts options)
<u>KINE</u>	<u>1100</u>	<u>Beginning Weight Training</u>
<u>MATH</u>	<u>1332</u>	<u>Contemporary Mathematics</u> (<u>Quantitative Reasoning</u>) (See Mathematics options)
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

Second Semester

Option 1: Basic Firefighter Certification
(Select 12 Credit Hours from Technical Education Courses)

Option 2: Fire Officer Certification
(Select 15 Credit Hours from Technical Education Courses)

Third Semester

Option 1: Basic Firefighter Certification		
EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic ²
EMSP	1371	Introduction to Emergency Medical Technician (EMT) ²
EMSP	1501	Emergency Medical Technician ²

Option 2: Fire Officer Certification
(Select 12 Credit Hours from Technical Education Courses not already taken)

SECOND YEAR**Fourth Semester**

Option 1: Basic Firefighter Certification
(12 Credit Hours from Basic Firefighter Certification not already taken)

Option 2: Fire Officer Certification
(9 Credit Hours from Fire Officer Certification not already taken)

Fifth Semester

Option 1: Basic Firefighter Certification
(11 Credit Hours from Basic Firefighter Certification not already taken)

Option 2: Fire Officer Certification
(8 Credit Hours from Fire Officer Certification not already taken)

TECHNICAL EDUCATION COURSES FOR BFC AND FOC

FIRT	1301	Fundamentals of Fire Protection
FIRT	1315	Hazardous Materials I ³
FIRT	1327	Building Construction in the Fire Service
FIRT	1338	Fire Protection Systems ⁴
FIRT	1349	Fire Administration II ⁵
FIRS	2344	Driver/Operator - Pumper ⁶
FIRT	1391	Special Topics in Fire Protection and Safety Technology/Technician: Haz-Mat Technical Response ⁷
FIRT	1392	Special Topics in Fire Services Administration: Officer Leadership ⁸
FIRS	1491	Special Topics in Fire Science/Firefighting: Rope Rescue ⁹

OPTION 1: BASIC FIREFIGHTER CERTIFICATION

FIRS	1301	Firefighter Certification I
FIRS	1407	Firefighter Certification II
FIRS	1313	Firefighter Certification III
FIRS	1319	Firefighter Certification IV
FIRS	1323	Firefighter Certification V
FIRS	1329	Firefighter Certification VI
FIRS	1433	Firefighter Certification VII (Capstone)

OPTION 2: FIRE OFFICER CERTIFICATION

FIRT	1442	Fire Officer I ¹⁰
FIRT	2305	Fire Instructor I ¹¹
FIRT	1443	Fire Officer II ¹²
FIRT	2307	Fire Instructor II ¹³
FIRT	2309	Firefighting Strategies and Tactics I (Capstone)

1. No Substitutions

2. A student that has met the EMT-Basic certification has met the requirements for this course.

3. A student with TCFP Basic Firefighter certification has met the requirements for this course.

4. A student with TCFP Fire Inspector I certification has met the requirements for this course.

5. A student with TCFP Fire Officer III certification has met the requirements for this course.

6. A student with TCFP Driver/ Operator-Pumper certification has met the requirements for this course.

7. A student with TCFP Haz-Mat Technician certification or TCFP Incident Safety Officer and TCFP Haz-Mat Incident Commander certification has met the requirements for this course.

8. A student with TCFP Fire Officer IV certification has met the requirements for this course.

9. A student with Ropes Rescue I and II certificates of completion, or TCFP Fire Investigator certification has met the requirements for this course.

10. A student with TCFP Fire Officer I certification has met the requirements for this course.

11. A student with TCFP Fire Instructor I certification has met the requirements for this course.

12. A student with TCFP Fire Officer II certification has met the requirements for this course.

13. A student with TCFP Fire Instructor II certification has met the requirements for this course.

Occupational Skills Award (OSA) – Fire Officer Candidate

10 credit hours

FIRT	1442	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies and Tactics I

Certificate Level 1 – Basic Firefighter

32 credit hours

First Semester

EMSP	1160	Clinical – Emergency Medical Technician (EMT Paramedic) – Basic ¹
EMSP	1371	Introduction to Emergency Medical Technician (EMT) ¹
EMSP	1501	Emergency Medical Technician ¹
FIRS	1301	Firefighter Certification I
FIRS	1313	Firefighter Certification III
FIRS	1407	Firefighter Certification II

Second Semester

FIRS	1319	Firefighter Certification IV
FIRS	1323	Firefighter Certification V
FIRS	1329	Firefighter Certification VI
FIRS	1433	Firefighter Certification VII (Capstone)

1. A student that has the EMT – Basic certificate has met this requirement.

Certificate Level 1 – Fire Officer

17 credit hours

First Semester

FIRT	1442	Fire Officer I
FIRT	2305	Fire Instructor I

Second Semester

FIRT	1443	Fire Officer II
FIRT	2307	Fire Instructor II
FIRT	2309	Firefighting Strategies and Tactics I (Capstone)

GEOSPATIAL INFORMATION SCIENCE (GIS)**Department Website:**<https://www.collin.edu/department/etcs/gis/index.html>**Program Options:****AAS – Geospatial Information Science (GIS)****Certificate Level 1 – Geospatial Information Science (GIS)****Certificate Level 2 – Geospatial Information Science (GIS)**

Every moment of every day, information is being logged about how we live and the world around us. Geospatial Information Science (GIS) utilizes hardware, software and data to analyze and display location-based information. Learn how to harness that data to visualize and solve spatial problems and to present information in a way that is easy to understand and interpret.

GIS specialty fields include; remote sensing, mapping, programming, geospatial intelligence, feature\image analysis, geographic information systems (GIS), location positioning and related areas.

The Geospatial Information Science (GIS) Associate of Applied Science and certificate programs are designed to prepare students for careers in the growing fields of GIS. This includes positions in numerous industries such as business, utilities, natural resources, real estate, transportation, government, telecommunication, education and public safety.

- Associate of Applied Science - Geospatial Information Science (GIS) (60 credit hours)
- Certificate Level 1 - Geospatial Information Science (GIS) (17 credit hours)
- Certificate Level 2 - Geospatial Information Science (GIS) (30 credit hours)

Collin College's GIS certificates can open doors for students in the workplace while laying the groundwork for continued study. All courses taken for the GIS certificates also apply to the Associate of Applied Science (AAS) degree. The certificate is for career changers or students

seeking to gain skills that may be applied in their current jobs or course of study. An AAS degree in GIS from Collin College prepares you to enter the job market or pursue a bachelor's degree.

AAS – Geospatial Information Science (GIS)

60 credit hours

FIRST YEAR**First Semester**

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
GISC	1411	Introduction to Geographic Information Systems (GIS)
GISC	2402	Geographic Information Systems (GIS) Design with Raster Analysis ¹
ITSE	1359	Introduction to Scripting Languages – Python

Second Semester

DFTG	1309	Basic Computer-Aided Drafting
GISC	2250	Scripting for Geographic Information Systems (GIS) ²
GISC	2420	Intermediate Geographic Information Systems (GIS) ²
ITSW	1304	Introduction to Spreadsheets – Excel
<u>GEN ED</u>		<u>Mathematics/Natural Sciences</u> course

Third Semester

GISC	2172	Geospatial Information Science (GIS) Portfolio Development ³
GISC	2231	Advanced Problems in Geographic Information Systems (GIS) ^{3,4}

SECOND YEAR**First Semester**

ENGL	2311	Technical and Business Writing
GISC	2311	Geographic Information Systems (GIS) Applications ¹
GISC	2459	Web-Served Geographic Information Systems (GIS) ¹
ITSW	1307	Introduction to Database – Access
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Second Semester

GISC	2335	Programming for Geographic Information Systems (GIS) ² (Capstone)
<u>GEN ED</u>		<u>Social/Behavioral Sciences</u> course
<u>GEN ED</u>		<u>Speech</u> course
ELECTIVE	*	

* *Elective (3 credit hours): BIOL 2406, ENVR 1401, any GEOG, or any GEOL*

1. *Fall Only. This course is offered in the fall semester only.*
2. *Spring Only. This course is offered in the spring semester only.*
3. *Summer Only. This course is offered in the summer semester only.*
4. *May substitute GISC 2281.*

Certificate Level 1 – Geospatial Information Science (GIS)

17 credit hours

First Semester

GISC	1411	Introduction to Geographic Information Systems (GIS)
GISC	2402	Geographic Information Systems (GIS) Design with Raster Analysis ¹

Second Semester

GISC	2250	Scripting for Geographic Information Systems (GIS) ²
GISC	2420	Intermediate Geographic Information Systems (GIS) ²

Third Semester

GISC	2172	Geospatial Information Science (GIS) Portfolio Development ³
GISC	2231	Advanced Problems in Geographic Information Systems (GIS) (Capstone) ^{3,4}

1. *Fall Only. This course is offered in the fall semester only.*
2. *Spring Only. This course is offered in the spring semester only.*
3. *Summer Only. This course is offered in the summer semester only.*
4. *May substitute GISC 2281.*

Certificate Level 2 – Geospatial Information Science (GIS)

30 credit hours

FIRST YEAR

First Semester

GISC	1411	Introduction to Geographic Information Systems (GIS)
GISC	2402	Geographic Information Systems (GIS) Design with Raster Analysis ¹
ITSE	1359	Introduction to Scripting Languages – Python

Second Semester

GISC	2250	Scripting for Geographic Information Systems (GIS) ²
GISC	2420	Intermediate Geographic Information Systems (GIS) ²

Third Semester

GISC	2172	Geospatial Information Science (GIS) Portfolio Development ³
GISC	2231	Advanced Problems in Geographic Information Systems (GIS) ^{3,4}

SECOND YEAR

First Semester

GISC	2311	Geographic Information Systems (GIS) Applications ¹
GISC	2459	Web-Served Geographic Information Systems (GIS) ¹

Second Semester

GISC	2335	Programming for Geographic Information Systems (GIS) (Capstone) ²
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1. *Fall Only. This course is offered in the fall semester only.*
2. *Spring Only. This course is offered in the spring semester only.*
3. *Summer Only. This course is offered in the summer semester only.*
4. *May substitute GISC 2281.*

HEALTH INFORMATION MANAGEMENT

Also see [Health Information Management/Medical Coding and Billing](#)

Department Website:

<http://www.collin.edu/him>

Program Option:

AAS – Health Information Management Certificate Level 2 – Data Management Applications for Healthcare

A career in Health Information Management (HIM) will put you at the center of a rapidly growing field that thrives on data. As an HIM professional, you will collect and protect medical information, including patient records and health data. You can help researchers track disease outbreaks, monitor potential health trends and provide up-to-the-minute health information to doctors, hospitals, insurance companies and patients.

All HIM classes are conducted online. A clinical component must also be completed in a Texas health care facility.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

The Associate of Applied Science (AAS) in Health Information Management (HIM) at Collin College is a 60-credit hour degree program preparing students for a career in health information management, as a health information professional. The program is accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) education. Curriculum is based on the AHIMA Foundation's curricular competencies for the Registered Health Information Technician (RHIT) credential and is approved by the Texas Higher Education. Upon successful completion of the coursework and the credential exam, facilitated by the American Health Information

Management Association (AHIMA), the graduate may use the designation RHIT behind their professional signature.

The Collin College Health Information Management program has a partnership with several university partners providing students with 3+1 and 2+2 pathways to baccalaureate degrees. Collin College HIM graduates have the opportunities to continue their studies online and sit for the RHIA certification. These academic agreements maximize the transfer of Collin College credit and allows Collin College students to complete some baccalaureate level courses at Collin College with Collin College's lower tuition costs. For more information, see your Collin College Advisor.

ACCREDITATION

The AAS in Health Information Management is accredited through the CAHIIM. They may be contacted at:

233 N. Michigan Ave., 21st floor

Chicago, IL 60601-5800

312.233.1100

www.cahiim.org

SPECIAL ADMISSION REQUIREMENTS

Admission to the AAS – HIM program is selective and based on a point system. Admission is limited to 25 students per semester. Application deadlines are the 2nd Friday in November and 2nd Friday in May. The application is found on the HIM program website: www.collin.edu/him and should be submitted to the department office via email, fax, or mail by the appropriate deadline.

Eligibility requirements for application to AAS-HIM program:

- Complete Collin College Admission requirements
- Complete Collin College reading, writing and mathematics assessments, placing at the College Level (TSI Testing).
- Overall GPA of 2.5. Please note that a grade of “C” or better must be earned in all HIM specific courses including HITT 1305, and BIOL 2404.
- Successful completion of all prerequisites with a grade of “C” or better. Registration details on the department webpage www.collin.edu/him
- Complete HIM packet. A complete HIM packet includes:
 - Completed HIM Application:
 - Consent for background check
 - Consent for drug screening
 - Immunization documentation – List of required immunizations are on the HIM webpage Note: Hepatitis B is typically a 7-month process. The TB screen and flu vaccine have a 12-month expiration
 - Signed Functional Abilities/Core Performance Standards for Health

Information Management Program - Clinical Expectations. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

- A 500-word essay explaining why you have chosen to become a Health Information professional.
- Two letters of reference from employers or teachers (not family or friends) that can attest to your professionalism. Letters should be emailed to the Program Director.

After Admission:

- Earn a grade of “C” or better in all major course work and maintain a 2.5 GPA to continue in the HIM program.
- All Clinical requirements may be found on the webpage at www.collin.edu/him.

AAS – Health Information Management

60 credit hours

PREREQUISITES

<u>BIOL</u>	<u>2404</u>	<u>Human Anatomy and Physiology Basic</u> ¹
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
HITT	1305	Medical Terminology I
HITT	2430	Pathophysiology and Pharmacology
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u>

FIRST YEAR

First Semester

HITT	1301	Health Data Content and Structure
HITT	1311	Health Information Systems
<u>HUMA</u>	<u>1301</u>	<u>Introduction to Humanities I</u> (See Humanities/Fine Arts options)
ITSW	1304	Introduction to Spreadsheets - Excel

Second Semester

HITT	1353	Legal and Ethical Aspects of Health Information
HITT	2435	Coding and Reimbursement Methodologies
ITSW	1307	Introduction to Database – Access
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)

SECOND YEAR

First Semester

HITT	2339	Health Information Organization and Supervision
HITT	2346	Advanced Medical Coding
HITT	2443	Quality Assessment and Performance Improvement
ITSE	2309	Database Programming – SQL

Second Semester

HITT	2272	Portfolio Development
HITT	2361	Clinical - Health Information / Medical Records Technology/Technician (Capstone)

1. Substitutions may be available on a case-by-case basis. Please see Associate Dean/Director for information.

Certificate Level 2 – Data Management Applications for Healthcare

17 credit hours

Students must be TSI complete.

(Designed for the Health Information Management person and others interested in developing skills to assist with database management, queries and reporting)

First Semester

<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u>
ITSE	2309	Database Programming-SQL
ITSW	1304	Introduction to Spreadsheets – Excel
ITSW	1307	Introduction to Database – Access

Second Semester

HITT	1311	Health Information Systems
HITT	2272	Portfolio Development (Capstone)

HEALTH INFORMATION MANAGEMENT / MEDICAL CODING AND BILLING

Also see [Health Information Management](#)

Department Website:

<http://www.collin.edu/him>

Program Options:**Certificate Level 1 – Medical Coding and Billing**

Students completing the Medical Coding Billing Certificate are better prepared for coding credentialing exams such as AHIMA's Certified Coding Associate (CCA) exam and the American Academy of Professional Coders (AAPC) Certified Professional Coder (CPC®) exam.

All courses in the Medical Coding Billing Certificate are included in the AAS-HIM Degree. Students completing the Medical Coding Billing Certificate may choose to continue their studies and complete the AAS-HIM Degree and sit for the Registered Health Information Technician (RHIT) credential.

The Medical Coding and Billing Certificate is a 27-credit hour on-line program that will prepare the student for the workforce as a medical coder/biller. The curriculum is based on the American Health Information Management Association's (AHIMA) competencies. Students planning to transfer to a college or university should check with

Collin College academic advisors. Also, check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

Certificate Level 1 – Medical Coding and Billing

27 credit hours

PREREQUISITES

BIOL	2404	Human Anatomy and Physiology Basic
HITT	1305	Medical Terminology I
HITT	2430	Pathophysiology and Pharmacology

FIRST YEAR**First Semester**

HITT	1301	Health Data Content and Structure
HITT	1311	Health Information Systems
HITT	2435	Coding and Reimbursement Methodologies

Second Semester

HITT	1353	Legal and Ethical Aspects of Health Information
HITT	2346	Advanced Medical Coding (Capstone)

HEALTH PROFESSIONS**Department Website:**

<http://www.collin.edu/department/healthprofessions/>

Program Options:**AAS – Health Professions**

- *Certified Nurse Aide (CNA) Track*
- *Electrocardiograph Technician (EKG) Track*
- *Emergency Medical Technician (EMT) Track*
- *Patient Care Technician (PCT) Track*
- *Phlebotomy Technician (PHLEB) Track*

Occupational Skills Award (OSA) – Health**Professions**

- *Certified Nurse Aide (CNA) Track*
- *Electrocardiograph Technician (EKG) Track*
- *Emergency Medical Technician (EMT) Track*
- *Patient Care Technician (PCT) Track*
- *Phlebotomy Technician (PHLEB) Track*

Certificate Level 1 – Health Professions

- *Certified Nurse Aide (CNA) Track*
- *Electrocardiograph Technician (EKG) Track*
- *Emergency Medical Technician (EMT) Track*
- *Patient Care Technician (PCT) Track*
- *Phlebotomy Technician (PHLEB) Track*

Collin College's Health Professions curriculum provides you with the training and knowledge you need for a rewarding career as a Certified Nurse Aide (CNA), Electrocardiography (EKG) Technician, Patient Care Technician (PCT), Emergency Medical Technician (EMT)

or Phlebotomy Technician (PHLEB). The five career tracks allow you to choose the specialization that best fits your career goals. Each track offers in-depth education with hands-on experience, thanks to experienced faculty that have worked in the healthcare field and valuable clinical partnerships with local hospitals, facilities, and clinics.

The variety of options in Health Professions also allows you to build your knowledge and skills as you progress through the different levels of educational awards. You can earn an Occupational Skills Award (OSA) and a Level 1 Certificates on your way to an Associate of Applied Science in Health Professions, providing you with the chance to work in your field of interest as you continue your education.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your Program Director and check with your licensing/certifying entity, if any, to determine your status.

The curriculum contains both transfer and workforce courses. The workforce courses are mainly offered at the Technical Campus and the Wylie Campus. For additional information, please contact the Health Professions Director at 214-491-6253.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities/Core Performance Standards" documents provided in the program information and application forms. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

Prior to enrolling in any clinical courses, students must complete all immunizations required by the Texas Department of State Health Services (TDSHS)*. All required workforce courses require a minimum grade of 75% to continue in the program.

** It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.*

Health Insurance - All Health Profession students are required to show proof of health insurance prior to starting clinical rotations each semester.

CPR - Requires current American Heart Association Basic Life Support CPR certification.

AAS – Health Professions - Certified Nurse Aide (CNA) Track

60 credit hours

FIRST YEAR

First Semester

BIOL	1406	Biology for Science Majors I
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
GOVT	2305	Federal Government (Federal constitution and topics) (See Social/Behavioral Sciences options)
HIST	1301	United States History I
HITT	1305	Medical Terminology I

Second Semester

ENGL	1302	Composition II
HPRS	1201	Introduction to Health Professions ¹
HPRS	2232	Health Care Communications
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

Third Semester

<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)
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SECOND YEAR

First Semester

HPRS	1303	End of Life Issues
HPRS	2301	Pathophysiology
HPRS	2321	Medical Law and Ethics for Health Professionals
HITT	2328	Introduction to Public Health

Second Semester

HPRS	1310	Introduction to Pharmacology
MDCA	1321	Administrative Procedures
NURA	1160	Clinical – Nursing Aide and Patient Care Assistant
NURA	1301	Nurse Aide for Health Care
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Third Semester

HPRS	2310	Basic Health Profession Skills II (Capstone)
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1. May substitute HPRS 1204

AAS – Health Professions - Electrocardiograph Technician (EKG) Track

60 credit hours

FIRST YEAR

First Semester

BIOL	1406	Biology for Science Majors I
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
HIST	1301	United States History I
HITT	1305	Medical Terminology I

Second Semester

HPRS	1102	Wellness and Health Promotion
HPRS	1201	Introduction to Health Professions ¹
HPRS	2301	Pathophysiology
MDCA	1321	Administrative Procedures
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)

Third Semester

HITT	2328	Introduction to Public Health
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)

SECOND YEAR

First Semester

DSAE	2303	Cardiovascular Concepts
ECRD	1211	Electrocardiography
GOVT	2305	Federal Government (Federal constitution and topics) (See Social/Behavioral Sciences options)
HPRS	2232	Health Care Communications
HPRS	2321	Medical Law and Ethics for Health Professionals

Second Semester

DSAE	1340	Diagnostic Electrocardiography
HPRS	1160	Clinical – Health Services/Allied Health/Health Sciences, General
HPRS	1303	End of Life Issues
HPRS	1310	Introduction to Pharmacology
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Third Semester

HPRS	2310	Basic Health Profession Skills II (Capstone)
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1. May substitute HPRS 1204

AAS – Health Professions - Emergency Medical Technician (EMT) Track

60 credit hours

FIRST YEAR

First Semester

BIOL	1406	Biology for Science Majors I
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>

GOVT	2305	Federal Government (Federal constitution and topics) (See Social/Behavioral Sciences options)
HIST	1301	United States History I
HITT	1305	Medical Terminology I

Second Semester

HPRS	1201	Introduction to Health Professions ¹
HPRS	2232	Health Care Communications
HPRS	2301	Pathophysiology
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

Third Semester

<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)
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SECOND YEAR

First Semester

HPRS	1102	Wellness and Health Promotion
HPRS	1303	End of Life Issues
HPRS	1310	Introduction to Pharmacology
MDCA	1321	Administrative Procedures
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Second Semester

EMSP	1160	Clinical – Emergency Medical Technician (EMT Paramedic) – Basic
EMSP	1371	Introduction to Emergency Medical Technician (EMT)
EMSP	1501	Emergency Medical Technician
HPRS	2321	Medical Law and Ethics for Health Professionals

Third Semester

HPRS	2310	Basic Health Profession Skills II (Capstone)
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1. May substitute HPRS 1204

AAS – Health Professions - Patient Care Technician (PCT) Track

60 credit hours

FIRST YEAR

First Semester

BIOL	1406	Biology for Science Majors I
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
HIST	1301	United States History I
HITT	1305	Medical Terminology I

Second Semester

GOVT	2305	Federal Government (Federal constitution and topics) (See Social/Behavioral Sciences options)
HPRS	1201	Introduction to Health Professions ¹

HPRS	2301	Pathophysiology
HPRS	2232	Health Care Communications
SPCH	1311	<u>Introduction to Speech Communication</u> (See Speech options)

Third Semester

NURA	1160	Clinical – Nursing Aide and Patient Care Assistant
NURA	1301	Nurse Aide for Health Care

SECOND YEAR**First Semester**

HPRS	1310	Introduction to Pharmacology
DSAE	1340	Diagnostic Electrocardiography
HPRS	1303	End of Life Issues
PSYC	2301	<u>General Psychology</u> (See Social/Behavioral Sciences options)

Second Semester

HPRS	2310	Basic Health Profession Skills II
PLAB	1323	Phlebotomy
PLAB	1260	Clinical - Phlebotomy
MATH	1342	<u>Elementary Statistical Methods</u> (See Mathematics options)
GEN ED		Humanities/Fine Arts course

Third Semester

NUPC	1160	Clinical - Nursing Assistant/Aide and Patient Care Assistant/Aide (Capstone)
NUPC	1320	Patient Care Technician/Assistant

1. May substitute HPRS 1204

AAS – Health Professions - Phlebotomy Technician (PHLEB) Track

60 credit hours

FIRST YEAR**First Semester**

BIOL	1406	Biology for Science Majors I
ENGL	1301	<u>Composition I</u>
GOVT	2305	Federal Government (Federal constitution and topics) (See Social/Behavioral Sciences options)
HIST	1301	United States History I
HITT	1305	Medical Terminology I

Second Semester

ENGL	1302	Composition II
HPRS	1102	Wellness and Health Promotion
HPRS	1201	Introduction to Health Professions ¹
PSYC	2301	<u>General Psychology</u> (See Social/Behavioral Sciences options)
SPCH	1311	<u>Introduction to Speech Communication</u> (See Speech options)

Third Semester

HPRS	1310	Introduction to Pharmacology
MATH	1342	<u>Elementary Statistical Methods</u> (See Mathematics options)

SECOND YEAR**First Semester**

HPRS	2321	Medical Law and Ethics for Health Professionals
HITT	2328	Introduction to Public Health
HPRS	1303	End of Life Issues
HPRS	2301	Pathophysiology

Second Semester

MDCA	1321	Administrative Procedures
HPRS	2310	Basic Health Profession Skills II (Capstone)
PLAB	1323	Phlebotomy
PLAB	1260	Clinical – Phlebotomy
GEN ED		Humanities/Fine Arts course

1. May substitute HPRS 1204

Occupational Skills Awards

Courses used in these awards, except HITT 1305 and HPRS 1271, are offered at the McKinney Campus and through dual credit at select high schools. Please visit the website <http://www.collin.edu/department/healthprofessions/> for additional information.

Occupational Skills Award (OSA) – Health Professions - Certified Nurse Aide (CNA) Track

12 credit hours

HITT	1305	Medical Terminology I
HPRS	1201	Introduction to Health Professions ¹
HPRS	2301	Pathophysiology
NURA	1160	Clinical - Nursing Aide and Patient Care Assistant
NURA	1301	Nurse Aide for Health Care

1. May substitute HPRS 1204

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

Occupational Skills Award (OSA) – Health Professions - Electrocardiograph Technician (EKG) Track

12 credit hours

DSAE	1340	Diagnostic Electrocardiography
DSAE	2303	Cardiovascular Concepts
ECRD	1211	Electrocardiography
HITT	1305	Medical Terminology I
HPRS	1160	Clinical – Health Services/Allied Health/Health Sciences, General

Occupational Skills Award (OSA) – Health Professions - Emergency Medical Technician (EMT) Track

14 credit hours

HITT	1305	Medical Terminology I
HPRS	1201	Introduction to Health Professions ¹
EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic
EMSP	1371	Introduction to Emergency Medical Technician (EMT)
EMSP	1501	Emergency Medical Technician

1. May substitute HPRS 1204

Occupational Skills Award (OSA) – Health Professions - Patient Care Technician (PCT) Track

14 credit hours

This award requires successful CNA, PHLEB and EKG course completion.

DSAE	1340	Diagnostic Electrocardiography
NURA	1160	Clinical - Nursing Aide and Patient Care Assistant
NURA	1301	Nurse Aide for Health Care
PLAB	1323	Phlebotomy

Second Semester

NUPC	1160	Clinical - Nursing Assistant/Aide and Patient Care Assistant/Aide
NUPC	1320	Patient Care Technician/Assistant

Note: This award requires permission to register for courses. Please contact Dr. Westcott, jwestcott@collin.edu, for more information.

Occupational Skills Award (OSA) – Health Professions - Phlebotomy Technician (PHLEB) Track

14 credit hours

HITT	1305	Medical Terminology I
HPRS	2310	Basic Health Profession Skills II
HPRS	2301	Pathophysiology
PLAB	1260	Clinical - Phlebotomy
PLAB	1323	Phlebotomy

Note: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

Certificate Level 1 – Health Professions - Certified Nurse Aide (CNA) Track

18 credit hours

FIRST YEAR

First Semester

HPRS	1201	Introduction to Health Professions ¹
HPRS	2301	Pathophysiology
HITT	1305	Medical Terminology I

Second Semester

HPRS	1303	End of Life Issues
HPRS	2310	Basic Health Profession Skills II
NURA	1160	Clinical - Nursing Aide and Patient Care Assistant (Capstone)
NURA	1301	Nurse Aide for Health Care

1. May substitute HPRS 1204

Certificate Level 1 – Health Professions - Electrocardiograph Technician (EKG) Track

20 credit hours

FIRST YEAR

First Semester

HITT	1305	Medical Terminology I
HPRS	1201	Introduction to Health Professions ¹
HPRS	2301	Pathophysiology

Second Semester

DSAE	1340	Diagnostic Electrocardiography
DSAE	2303	Cardiovascular Concepts
ECRD	1211	Electrocardiography

Third Semester

HPRS	1160	Clinical – Health Services/Allied Health/Health Sciences, General (Capstone)
HPRS	2310	Basic Health Profession Skills II

1. May substitute HPRS 1204

Certificate Level 1 – Health Professions – Emergency Medical Technician (EMT) Track

23 credit hours

FIRST YEAR

First Semester

HPRS	1201	Introduction to Health Professions ¹
HPRS	1303	End of Life Issues
HPRS	2301	Pathophysiology
HITT	1305	Medical Terminology I

Second Semester

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic (Capstone)
EMSP	1371	Introduction to Emergency Medical Technician (EMT)

EMSP	1501	Emergency Medical Technician
HPRS	2310	Basic Health Profession Skills II

1. May substitute HPRS 1204

Certificate Level 1 – Health Professions - Patient Care Technician (PCT) Track

30 credit hours

FIRST YEAR

First Semester

HITT	1305	Medical Terminology I
HPRS	1201	Introduction to Health Professions ¹
HPRS	2301	Pathophysiology
NURA	1301	Nurse Aide for Health Care
NURA	1160	Clinical - Nursing Aide and Patient Care Assistant

Second Semester

DSAE	1340	Diagnostic Electrocardiography
HPRS	1303	End of Life Issues
PLAB	1260	Clinical - Phlebotomy
PLAB	1323	Phlebotomy

Third Semester

HPRS	2310	Basic Health Profession Skills II
NUPC	1160	Clinical - Nursing Assistant/Aide and Patient Care Assistant/Aide (Capstone)
NUPC	1320	Patient Care Technician/Assistant

1. May substitute HPRS 1204

Certificate Level 1 – Health Professions - Phlebotomy Technician (PHLEB) Track

19 credit hours

FIRST YEAR

First Semester

HITT	1305	Medical Terminology I
HPRS	1201	Introduction to Health Professions ¹
HPRS	2301	Pathophysiology
ELECTIVE	*	

Second Semester

HPRS	2310	Basic Health Profession Skills II
PLAB	1260	Clinical - Phlebotomy (Capstone)
PLAB	1323	Phlebotomy

* Electives (3 credit hours): HITT 2328, HPRS 1303, HPRS 1310, or HPRS 2321

1. May substitute HPRS 1204

HOSPITALITY AND FOOD SERVICE MANAGEMENT

Department Website:

<http://www.collin.edu/department/ihce/index.html>

Program Options:

AAS – Hospitality and Food Service Management

- Hotel / Restaurant Management Track
- Meetings and Event Management Track

Certificate Level 1 – Foundations of Restaurant Operations

Certificate Level 1 – Foundations of Meetings and Event Management

Certificate Level 1 – Foundations of Hotel Operations

Certificate Level 2 – Hospitality and Foodservice Management

Certificate Level 2 – Meetings and Event Management

What is hospitality and foodservice management?

Hospitality and foodservice management industry is a high-growth and fast-paced industry with domestic and international opportunities in management sectors including lodging management, food and beverage management, and meeting and event management.

Why hospitality and tourism management?

Collin College has a tradition of preparing individuals for supervisory and management roles in the global hospitality industry. Collin College offers a business-focused curriculum, hands-on learning, and a cooperative work experience component. Our students learn with a supportive faculty and industry professionals who have diverse industry experience. Students enjoy opportunities to connect with industry professionals through industry events.

Part of the Collin College's Institute of Hospitality and Culinary Education (IHCE), classes are taught by industry professionals who emphasize problem-solving, creativity and industry involvement, in addition to practical on-the-job experience. By the time you completed an Associate of Applied Science degree from Collin, you will have achieved more than 300 hours of work experience directly related to your chosen field. The program also offers certificates, so you can get a quicker return on your educational investment as you build toward an AAS degree.

ACCREDITATION

The Hospitality and Foodservice Management program is fully accredited by the Accreditation Commission on Programs in Hospitality Administration (ACPHA).

<http://www.acpha-cahm.org/>

TRANSFER

The Hospitality and Foodservice Management Program completed a 2 + 2 agreement with Texas Tech University (TTU). This program allows a Collin College student to apply all 60 credit hours from their AAS degree and 16 credit hours from advanced general education course to a Bachelor of Applied Arts and Science (BAAS) Degree in Restaurant, Hotel, and Institutional Management (RHIM) from TTU. Starting with the Spring 2021 semester TTU will start offering the classes needed to complete the BAAS degree in RHIM at the Collin Higher Education Center in McKinney, TX.

The program has completed articulation agreements with highly ranked universities that offer a bachelor's degree in hospitality, restaurant, foodservice, or meeting and event management programs. The universities are Texas Tech University College of Human Sciences Hospitality & Retail Management, University of Houston Conrad N. Hilton College of Hotel & Restaurant Management, University of North Texas's College of Merchandising, Hospitality, and Tourism, Missouri State University's Department of Hospitality Leadership, and Business and Hotel Management School in Lucerne, Switzerland. Our program is currently developing an articulation agreement with Oklahoma State University Spears School of Business Hospitality and Tourism Management, Steven F. Austin State University College of Human Sciences Hospitality Administration Program, and Woosung University Sol International School College of Hotel and Culinary Arts in Daejeon, Republic of Korea.

Students planning to transfer to a college or university should check with a Collin College academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Hospitality and Food Service Management – Hotel / Restaurant Management Track

60 credit hours

FIRST YEAR**First Semester**

CHEF 1305 Sanitation and Safety ^{1,2}
ENGL 1301 Composition I
 HAMG 1321 Introduction to Hospitality Industry

HAMG 1340 Hospitality Legal Issues
 TRVM 2301 Introduction to Convention/Meeting Management

Second Semester

HAMG 1313 Front Office Management
 HAMG 1324 Hospitality Human Resources Management
 HAMG 2337 Hospitality Facilities Management

GEN ED Humanities/Fine Arts course
 RSTO 1325 Purchasing for Hospitality Operations

Third Semester

MATH 1332 Contemporary Mathematics (Quantitative Reasoning)
 (See Mathematics options)

GEN ED Social/Behavioral Sciences course

SECOND YEAR**First Semester**

HAMG 2301 Principles of Food and Beverage Operations
 HAMG 2307 Hospitality Marketing and Sales
 HAMG 2380 Cooperative Education – Hospitality Administration/Management, General
SPCH 1321 Business and Professional Communication (See Speech options)

Second Semester

HAMG 2305 Hospitality Management and Leadership (Capstone)
 HAMG 2332 Hospitality Financial Management
 RSTO 2307 Catering
 ELECTIVE *

* *Elective: (3 Credit Hours): CHEF 1301, CHEF 1364, HAMG 1366, PSTR 1301, PSTR 1364, RSTO 1301, RSTO 1364, TRVM 1327, TRVM 1366, TRVM 2341, or TRVM 2355*

1. *Certification in ServSafe*
2. *Certification in Food Protection Management*

Many courses are offered in eight-week express sessions.

AAS – Hospitality and Food Service Management – Meetings and Event Management Track

60 credit hours

FIRST YEAR**First Semester**

ENGL 1301 Composition I
 HAMG 1321 Introduction to Hospitality Industry
 HAMG 1340 Hospitality Legal Issues
 TRVM 1327 Special Events Design
 TRVM 2301 Introduction to Convention/Meeting Management

Second Semester

GEN ED Humanities/Fine Arts course
 HAMG 1324 Hospitality Human Resources Management
 HAMG 2337 Hospitality Facilities Management
 TRVM 2341 International Convention/Meeting Management
 TRVM 2355 Exposition and Trade Show Operations

Third Semester

GEN ED [Social/Behavioral Sciences](#) course
MATH 1332 [Contemporary Mathematics](#)
[\(Quantitative Reasoning\)](#)
 (See [Mathematics](#) options)

SECOND YEAR**First Semester**

HAMG 2301 Principles of Food and Beverage
Operations
 HAMG 2307 Hospitality Marketing and Sales
SPCH 1321 [Business and Professional](#)
[Communication](#) (See [Speech](#) options)
 TRVM 2380 Cooperative Education – Tourism and
Travel Services Management

Second Semester

HAMG 2305 Hospitality Management and Leadership
(Capstone)
 HAMG 2332 Hospitality Financial Management
 RSTO 2307 Catering
 ELECTIVE *

* *Elective (3 credit hours): CHEF 1301, CHEF 1305, CHEF 1364, HAMG 1313, HAMG 1366, PSTR 1301, PSTR 1364, RSTO 1301, RSTO 1325, RSTO 1364, or TRVM 1366*

Many courses are offered in eight-week express sessions.

Certificate Level 1 – Foundations of Restaurant Operations

18 credit hours

FIRST YEAR**First Semester**

CHEF 1305 Sanitation and Safety ^{1,2}
 HAMG 1321 Introduction to Hospitality Industry
 HAMG 1324 Hospitality Human Resources
Management
 RSTO 1325 Purchasing for Hospitality Operations
 HAMG 2301 Principles of Food and Beverage
Operations (Capstone)
 ELECTIVE *

* *Elective (3 credit hours): CHEF 1301, CHEF 1364, HAMG 1366, HAMG 2307, PSTR 1301, PSTR 1364, RSTO 1301, RSTO 1364, TRVM 1327, TRVM 1366, or TRVM 2301*

1. Certification in ServSafe

2. Certification in Food Protection Management

Many courses are offered in eight-week express sessions.

Certificate Level 1 – Foundations of Hotel Operations

18 credit hours

FIRST YEAR**First Semester**

HAMG 1321 Introduction to Hospitality Industry
 HAMG 1313 Front Office Management
 HAMG 1324 Hospitality Human Resources
Management
 TRVM 2301 Introduction to Convention/Meeting
Management
 HAMG 2307 Hospitality Marketing and Sales
(Capstone)
 ELECTIVE *

* *Elective (3 credit hours): CHEF 1301, CHEF 1305, CHEF 1364, HAMG 1366, HAMG 2301, PSTR 1301, PSTR 1364, RSTO 1301, RSTO 1325, RSTO 1364, TRVM 1327, or TRVM 1366*

Many courses are offered in eight-week express sessions.

Certificate Level 1 – Foundations of Meetings and Event Management

18 credit hours

FIRST YEAR**First Semester**

HAMG 1321 Introduction to Hospitality Industry
 TRVM 1327 Special Events Design
 TRVM 2301 Introduction to Convention/Meeting
Management
 TRVM 2341 International Convention/Meeting
Management (Capstone)
 TRVM 2355 Exposition and Trade Show
Operations
 ELECTIVE *

* *Elective (3 credit hours) CHEF 1301, CHEF 1305, CHEF 1364, HAMG 1313, HAMG 1324, HAMG 1366, HAMG 2301, PSTR 1301, PSTR 1364, RSTO 1301, RSTO 1325, or TRVM 1366*

Many courses are offered in eight-week express sessions.

Certificate Level 2 – Meetings and Event Management

36 credit hours

Students must be TSI complete.

FIRST YEAR**First Semester**

HAMG 1321 Introduction to Hospitality Industry
 TRVM 1327 Special Events Design
 TRVM 2301 Introduction to Convention / Meeting
Management

TRVM 2341	International Convention / Meeting Management
TRVM 2355	Exposition and Trade Show Operations
ELECTIVE *	

Second Semester

HAMG 1340	Hospitality Legal Issues
HAMG 2307	Hospitality Marketing and Sales
HAMG 2337	Hospitality Facilities Management
HAMG 2332	Hospitality Financial Management
HAMG 2305	Hospitality Management and Leadership (Capstone)

ELECTIVE **

* *Elective (3 credit hours) CHEF 1301, CHEF 1305, CHEF 1364, HAMG 1313, HAMG 1324, HAMG 1366, HAMG 2301, PSTR 1301, PSTR 1364, RSTO 1301, RSTO 1325, or TRVM 1366*

** *Elective (3 credit hours) CHEF 1301, CHEF 1305, CHEF 1364, CHEF 2380, HAMG 1313, HAMG 1366, HAMG 2380, PSTR 1301, PSTR 1364, PSTR 2380, RSTO 1301, RSTO 1325, RSTO 1364, TRVM 1366, or TRVM 2380*

Many courses are offered in eight-week express sessions.

Certificate Level 2 – Hospitality and Foodservice Management

36 credit hours

Students must be TSI complete.

First Semester

CHEF 1305	Sanitation and Safety ^{1,2}
HAMG 1321	Introduction to Hospitality Industry
HAMG 1324	Hospitality Human Resources Management
RSTO 1325	Purchasing for Hospitality Operations
HAMG 2301	Principles of Food and Beverage Operations

ELECTIVE *

Second Semester

HAMG 1340	Hospitality Legal Issues
HAMG 2307	Hospitality Marketing and Sales
HAMG 2337	Hospitality Facilities Management
HAMG 2332	Hospitality Financial Management
HAMG 2305	Hospitality Management and Leadership (Capstone)

ELECTIVE **

* *Elective (3 credit hours) CHEF 1301, CHEF 1364, HAMG 1366, HAMG 2307, PSTR 1301, PSTR 1364, RSTO 1301, RSTO 1364, TRVM 1327, TRVM 1366, or TRVM 2301*

** *Elective (3 credit hours): CHEF 2380, HAMG 2380, PSTR 2380, or TRVM 2380*

1. *Certification in ServSafe*

2. *Certification in Food Protection Management*

Many courses are offered in eight-week express sessions.

HUMAN RESOURCES AND ORGANIZATIONAL MANAGEMENT

Program Options:

AAS – Human Resources and Organizational Management

Certificate Level 1 – Human Resources

Collin College's Human Resources Management (HRM or HR) provides students with a strategic approach to effective management of people in a company or organization in a way which creates a competitive advantage. The Human Resources degree and certificate is built on the Society of Human Resources Management (SHRM) learning outcomes. Human resources managers recruit, hire, plan, direct, and deploy the organization's employees. They are employed in nearly every industry.

AAS – Human Resources Management and Organizational Management

60 credit hours

FIRST YEAR

First Semester

BMGT 2303	Problem Solving and Decision Making
HRPO 1302	Human Resources Training and Development
HRPO 1311	Human Relations
HRPO 2301	Human Resources Management
ENGL 1301	<u>Composition I</u>

Second Semester

BMGT 1305	Communications in Management
HRPO 2304	Employee Relations
HRPO 2306	Benefits and Compensation
HRPO 2307	Organizational Behavior
MATH 1342	<u>Elementary Statistical Methods</u> (See Mathematics options)

SECOND YEAR

First Semester

BCIS 1305	Business Computer Applications
HRPO 1371	Human Resources Intercultural Management
HRPO 2305	Human Resources Information Systems
HRPO 1306	Basic Mediator Training
SPCH 1321	<u>Business and Professional Communication</u> (See Speech options)

Second Semester

ACNT 1303	Introduction to Accounting I ¹
BMGT 2311	Change Management
ECON 1301	<u>Introduction to Economics</u> ²

GEN ED [Humanities/Fine Arts](#) course
 HRPO 2303 Employment Practices ³

1. *May substitute ACCT 2301*
2. *May substitute ECON 2301, ECON 2302 or PSYC 2301*
3. *Department permit required before enrollment*

Certificate Level 1 – Human Resources

21 credit hours

FIRST YEAR

First Semester

HRPO 1302 Human Resources Training and Development
 HRPO 1311 Human Relations
 HRPO 2301 Human Resources Management

Second Semester

HRPO 2304 Employee Relations
 HRPO 2306 Benefits and Compensation
 HRPO 2307 Organizational Behavior

Third Semester

HRPO 2303 Employment Practices ¹ (Capstone)

1. *Department permit required before enrollment*

HVAC (HEATING, VENTILATION, AIR CONDITIONING)

Program Options:

AAS – HVAC (Heating, Ventilation, Air Conditioning)

Certificate Level 1 – HVAC Entry Certification

Certificate Level 1 – HVAC Residential Servicing Certification

Certificate Level 2 – HVAC Commercial Servicing Certification

The need for qualified heating, ventilation, air conditioning (HVAC) technicians is never going away. Collin College can teach you what it takes to work in the residential HVAC industry installing and servicing gas and electric furnaces and heat pump systems.

You will learn how to work safely and responsibly within Environmental Protection Agency guidelines and standards that apply to the HVAC industry, and identify and use HVAC equipment, components and tools, while understanding their functions within the industry. You will also learn common mechanical, electrical and electronic components such as compressors, switches, thermostats, motors and fans. You will even be able to practice all of the techniques you learn with heat pumps, heating units, a/c units, refrigeration units and more with hands-on instruction in Collin College facilities.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Students planning to transfer to a college or university should check with the Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

For more information, please contact the program director, Brian Sanders at bsanders@collin.edu.

AAS – HVAC (Heating, Ventilation, Air Conditioning)

60 credit hours

FIRST YEAR

First Semester

First 8 Weeks

HART 1401 Basic Electricity for HVAC
 HART 1407 Refrigeration Principles

Second 8 Weeks

HART 1441 Residential Air Conditioning
 HART 1445 Gas and Electric Heating

Second Semester

First 8 Weeks

HART 2431 Advanced Electricity for HVAC
 HART 2438 Air Conditioning Installation and Startup

Second 8 Weeks

HART 2345 Residential Air Conditioning Systems Design
 HART 2349 Heat Pumps

SECOND YEAR

First Semester

First 8 Weeks

HART 2341 Commercial Air Conditioning
 HART 2342 Commercial Refrigeration

SPCH 1321 Business and Professional Communication (See [Speech](#) options)

Second 8 Weeks

HART 2334 Advanced A/C Controls
 HART 2343 Industrial Air Conditioning

Second Semester

ECON 1301 Introduction to Economics ¹
 (See [Social/Behavioral Sciences](#) options)

ENGL 1301 Composition I
 HART 2358 Testing, Adjusting, and Balancing HVAC Systems (Capstone)

GEN ED [Humanities/Fine Arts](#) course
GEN ED [Mathematics](#) course

Certificate Level 1 – HVAC Entry Certification

16 credit hours

FIRST YEAR**First Semester***First 8 Weeks*

HART 1401	Basic Electricity for HVAC
HART 1407	Refrigeration Principles

Second 8 Weeks

HART 1441	Residential Air Conditioning (Capstone)
HART 1445	Gas and Electric Heating

Certificate Level 1 – HVAC Residential Servicing Certification

30 credit hours

FIRST YEAR**First Semester***First 8 Weeks*

HART 1401	Basic Electricity for HVAC
HART 1407	Refrigeration Principles

Second 8 Weeks

HART 1441	Residential Air Conditioning
HART 1445	Gas and Electric Heating

Second Semester*First 8 Weeks*

HART 2431	Advanced Electricity for HVAC
HART 2438	Air Conditioning Installation and Startup

Second 8 Weeks

HART 2345	Residential Air Conditioning Systems Design
HART 2349	Heat Pumps (Capstone)

Certificate Level 2 – HVAC Commercial Servicing Certification

45 credit hours

*Students must be TSI complete.***FIRST YEAR****First Semester***First 8 Weeks*

HART 1401	Basic Electricity for HVAC
HART 1407	Refrigeration Principles

Second 8 Weeks

HART 1441	Residential Air Conditioning
HART 1445	Gas and Electric Heating

Second Semester*First 8 Weeks*

HART 2431	Advanced Electricity for HVAC
HART 2438	Air Conditioning Installation and Startup

Second 8 Weeks

HART 2345	Residential Air Conditioning Systems Design
HART 2349	Heat Pumps

SECOND YEAR**First Semester***First 8 Weeks*

HART 2341	Commercial Air Conditioning
HART 2342	Commercial Refrigeration
SPCH 1321	<u>Business and Professional Communication</u> (See Speech options)

Second 8 Weeks

HART 2334	Advanced A/C Controls (Capstone)
HART 2343	Industrial Air Conditioning

*Verification of Workplace Competencies: Obtaining Industry Certification (NATE)***INFORMATION SYSTEMS CYBERSECURITY****Program Options:****AAS – Information Systems Cybersecurity****Certificate Level 1 – CISSP Information Systems Cybersecurity Professional****Certificate Level 1 – Cybersecurity Infrastructure Technician****Certificate Level 1 – Information Systems Cybersecurity**

With high-profile information breaches and identity thefts in the news regularly, the need to secure data and the systems that store it has never been more important. Play your part in keeping important information safe with a certificate or degree from Collin College's Information Systems Cybersecurity program.

Collin College's cybersecurity program will prepare you for a career in cybersecurity management and support with an education in network management, system administration, technical support, hardware/software installation and equipment repair. Courses and hands-on labs will prepare you to take a variety of Cisco, Microsoft, and CompTIA certification examinations. As a graduate with an Associate of Applied Science, you will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also

check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Information Systems Cybersecurity

60 credit hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITSY	1371	OSINT and Introductory Security Analysis
ITSY	2300	Operating System Security
ENGL	1301	<u>Composition I</u>

Second Semester

ITCC	1314	CCNA 1: Introduction to Networks
ITSC	1316	Linux Installation and Configuration
ITSY	1300	Fundamentals of Information Security
ITSY	1372	Cyber-Psychology and the Effects of Emerging Technology
ITSY	2301	Firewalls and Network Security Design

SECOND YEAR

First Semester

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSY	2330	Intrusion Detection
MATH	1342	<u>Elementary Statistical Methods</u> (See Mathematics options)
SPCH	1321	<u>Business and Professional Communication</u> (See Speech options)

ELECTIVE *

Second Semester

ECON	2302	<u>Principles of Microeconomics</u> (See Social/Behavioral Sciences options)
ITSC	1342	Shell Programming - Scripting
ITSY	2341	Security Management Practices (Capstone)
ITSY	2343	Computer System Forensics
PHIL	2303	<u>Introduction to Formal Logic</u> (See Humanities options)

* Elective (3 credit hours): ITSY 2572 (recommended), or any ITCC, ITNW, ITMT, or ITSY course not listed above

Certificate Level 1 – CISSP Information Systems Cybersecurity Professional

20 credit hours

Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

ITNW	1358	Network+
ITSY	1300	Fundamentals of Information Security
ITSY	2300	Operating System Security

Second Semester

ITSY	2341	Security Management Practices (Capstone)
ITSY	2572	Certified Information Systems Security Professional (CISSP) Common Body of Knowledge Domain Instruction

ELECTIVE *

* Elective (3 credit hours): Any ITSY course not listed above, with consent of the Associate Dean/Director

Certificate Level 1 – Cybersecurity Infrastructure Technician

21 credit hours

Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

First 8 Weeks

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+

Second 8 Weeks

ITSC	1316	Linux Installation and Configuration
ITSY	1371	OSINT and Introductory Security Analysis

Second Semester

First 8 Weeks

ITSY	1372	Cyber-Psychology and the Effects of Emerging Technology
ITSY	2300	Operating System Security

Second 8 Weeks

ITSY	2301	Firewalls and Network Security Design (Capstone)
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Certificate Level 1 – Information Systems Cybersecurity

36 credit hours

Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

FIRST YEAR

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITNW	1358	Network+
ITCC	1314	CCNA 1: Introduction to Networks
ITSY	1371	OSINT and Introductory Security Analysis

Second Semester

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSY	1300	Fundamentals of Information Security
ITSY	1372	Cyber-Psychology and the Effects of Emerging Technology

SECOND YEAR

First Semester

ITSY	2300	Operating System Security
ITSY	2301	Firewalls and Network Security Design
ITSY	2330	Intrusion Detection

Second Semester

ITSY	2341	Security Management Practices (Capstone)
ITSY	2343	Computer System Forensics

INSURANCE MANAGEMENT

Department Website:

<https://www.collin.edu/department/insurancemanagement/>

Program Options:

AAS – Insurance Management

Certificate Level 1 – Insurance Industry

The Insurance Management degree program and the certificate program at Collin College are designed to prepare students for a variety of positions in the Insurance Industry. Coursework offers students the opportunity to pursue professional designations as they complete their course work in the program. Students also learn information that prepares them to pass the Texas Department of Insurance Licensing Exam. The program fosters critical thinking skills, analytical skills and interpersonal skills as students develop broad based knowledge regarding numerous functions within the insurance industry such as claims, underwriting, sales, agency development and/or risk management.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Insurance Management

60 credit hours

FIRST YEAR

First Semester

BCIS	1305	Business Computer Applications
BUSI	1307	Personal Finance
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
INSR	1301	Commercial Insurance
INSR	1305	Personal Insurance

Second Semester

INSR	1345	Commercial Liability Risk Management and Insurance
INSR	1374	Personal Lines Insurance Underwriting
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (see Mathematics options)
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course
<u>GEN ED</u>		<u>Speech</u> course

SECOND YEAR

First Semester

BMGT	1344	Negotiations and Conflict Management
INSR	1351	Essentials of Risk Management
INSR	1353	Insurance Operations
MRKG	2333	Principles of Selling
<u>GEN ED</u>		<u>Social / Behavioral Sciences</u> course

Second Semester

BMGT	2303	Problem Solving and Decision Making ¹
INSR	1355	The Legal Environment of Insurance (Capstone)
INSR	1375	Insurance Data Analytics
INSR	2319	Liability Insurance Claims Adjusting
INSR	2340	Multiline Insurance Sales and Marketing

1. May substitute BUSG 2380

Certificate Level 1 – Insurance Industry

15 credit hours

FIRST YEAR

First Semester

BUSI	1307	Personal Finance
INSR	1301	Commercial Insurance
INSR	1305	Personal Insurance

Second Semester

INSR	1345	Commercial Liability Risk Management and Insurance (Capstone)
INSR	1374	Personal Lines Insurance Underwriting

INTERIOR DESIGN**Department Website:**

<https://www.collin.edu/department/constructionmanagement/interiordesign.html>

Program Options:**AAS – Interior Design****Occupational Skills Award (OSA) – Interior Design****Certificate Level 1 – Interior Design****Certificate Level 2 – Interior Design**

As an interior designer, you can shape the way your clients interact with the world. With Collin College's Interior Design program, you will learn how to use space effectively and responsibly, considering your supply sourcing, client needs and other factors.

You will learn skills important to any architect or interior designer, including spatial composition, drafting, space planning, building codes and material selection. Students are immediately valuable to employers because of the college's strong curriculum in computer-aided design drafting, and the program's strengths in advanced levels of drafting and modeling means you can position yourself within interior and architectural design firms to continue your training.

Interior Design is a state-licensed profession and all state requirements must be met before either title can be used.

Students planning to transfer to a college or university should check with the Collin College academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

All new students: Please contact one of the Interior Design faculty or the college academic advisor prior to registering for any INDS courses.

AAS – Interior Design

60 credit hours

FIRST YEAR**First Semester**

INDS 1301 Basic Elements of Design
 INDS 1349 Fundamentals of Space Planning
 INDS 1352 History of Interiors II
 INDS 1372 Computer-Aided Drafting for Interior Designers

SPCH 1321 Business and Professional Communication (See [Speech](#) options)

Second Semester

INDS 1319 Technical Drawing for Interior Designers
 INDS 2310 Kitchen and Bath Design
 INDS 2313 Residential Design I

MATH 1324 Mathematics for Business and Social Sciences (See [Mathematics](#) options)
 GEN ED Social/Behavioral Sciences course

SECOND YEAR**First Semester**

INDS 1315 Materials, Methods and Estimating
 INDS 1345 Commercial Design I
 INDS 2317 Rendering Techniques
 INDS 2335 Residential Design II
 ENGL 1301 Composition I

Second Semester

INDS 2325 Professional Practices for Interior Designers
 INDS 2330 Interior Design Building Systems (Capstone)
 INDS 2331 Commercial Design II
 INDS 2337 Portfolio Presentation
 GEN ED Humanities/Fine Arts course

Note: May substitute INDS 2380 for any INDS course, with consent of Associate Dean/Director.

Occupational Skills Award (OSA) – Interior Design

12 credit hours

FIRST YEAR**First Semester**

INDS 1301 Basic Elements of Design
 INDS 1349 Fundamentals of Space Planning
 INDS 1352 History of Interiors II
 INDS 1372 Computer-Aided Drafting for Interior Designers

Certificate Level 1 – Interior Design

21 credit hours

FIRST YEAR**First Semester**

INDS 1301 Basic Elements of Design
 INDS 1349 Fundamentals of Space Planning
 INDS 1352 History of Interiors II
 INDS 1372 Computer-Aided Drafting for Interior Designers

Second Semester

INDS 1319 Technical Drawing for Interior Designers
 INDS 2310 Kitchen and Bath Design (Capstone)
 INDS 2313 Residential Design I

Certificate Level 2 – Interior Design

45 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

INDS	1301	Basic Elements of Design
INDS	1349	Fundamentals of Space Planning
INDS	1352	History of Interiors II
INDS	1372	Computer-Aided Drafting for Interior Designers

Second Semester

INDS	1319	Technical Drawing for Interior Designers
INDS	2310	Kitchen and Bath Design
INDS	2313	Residential Design I

SECOND YEAR

First Semester

INDS	1315	Materials, Methods and Estimating
INDS	1345	Commercial Design I
INDS	2317	Rendering Techniques
INDS	2335	Residential Design II

Second Semester

INDS	2325	Professional Practices for Interior Designers
INDS	2330	Interior Design Building Systems (Capstone)
INDS	2331	Commercial Design II
INDS	2337	Portfolio Presentation

INTERPRETER TRAINING PROGRAM (ITP)

Also see [American Sign Language](#) area of study for transfer coursework.

Department Website:

<https://www.collin.edu/department/asliep/>

Program Options:

AAS – Interpreter Training Program (ITP)

Certificate Level 2 – ASL Studies

Certificate Level 3 – ESC – Interpreting in Medical Settings

(Note: In order to become a Texas BEI Certified Interpreter, you must have an associate degree or have earned 60 credit hours from an accredited college or university.)

Interested in an American Sign Language (ASL) interpreting career? Collin College's Interpreter Training Program (ITP) can put you on a path to a personally rewarding career working with the Deaf community.

As an ITP student, your education will be based in a foundation of American Sign Language. Focus areas are

language learning, interpreting skills and an understanding of Deaf Culture taught by Deaf professors.

Interpreting requires excellence in ASL and a thorough knowledge of oneself and one's ethics because interpreters are privy to confidential information. Students must complete skills development – including workshops, lab materials, and interaction with ASL Lab assistants, group study, community events, and online materials – that strengthens their language skills. Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Vaccination Requirements for Interpreters in a Healthcare Setting: As of January 1, 2012, the Joint Commission has a requirement that all on-site Contract Medical Interpreters are current on all immunizations. This has become known as "hospital ready". Proof of Immunization records required: Hepatitis B (requires 7 months to get all 3 shots required), annual Tuberculosis "TB" screening and annual Influenza. Some agencies also require proof of MMR, DTAP, and Varicella. Contact your physician and ask for a statement of current vaccinations. If you do not meet all the requirements above, please schedule an appointment with your physician and obtain your needed immunizations. These immunizations will be required prior to some onsite observations.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

Pass/Fail Option

Non-degree-seeking students may take a sign language class as pass/fail. Degree-seeking students should not pursue this option. The pass/fail option will not satisfy the degree-seeking transfer requirements.

Note: Students may not convert a pass/fail grade to a letter grade. Foreign language classes, including sign language, cannot be audited.

AAS – Interpreter Training Program (ITP)

65 credit hours

FIRST YEAR

First Semester

ENGL 1301 Composition I

MATH 1314 College Algebra

(See [Mathematics](#) options)

SGNL 1401 Beginning American Sign Language I +
 SLNG 1215 Visual/Gestural Communication (*Fall Semester only*)

Second Semester

SGNL 1402 Beginning American Sign Language II +
 SLNG 1207 Intra-lingual Skills Development for Interpreters (*Spring Semester only*)
 SLNG 1347 Deaf Culture
 SPCH 1311 Introduction to Speech Communication (See [Speech](#) options)

Third Semester

SGNL 2301 Intermediate American Sign Language I +
 SLNG 1211 Fingerspelling and Numbers
 SLNG 1321 Introduction to the Interpreting Profession

SECOND YEAR

First Semester

SGNL 2302 Intermediate American Sign Language II +
 SLNG 1350 Sign-to-Voice (*Fall Semester only*)
 SLNG 2301 Interpreting I (*Fall Semester only*)
 GEN ED [Social/Behavioral Sciences](#) course

Second Semester

PHIL 2306 Introduction to Ethics (See [Humanities/Fine Arts](#) options)
 SLNG 2186 Internship I – Sign Language Interpretation and Translation
 SLNG 2302 Interpreting II (*Spring Semester only*)
 SLNG 2303 Transliterating (*Spring Semester only*)
 SLNG 2311 Interpreting in Specialized Settings (*Spring Semester only*)

Third Semester

SLNG 1248 Vocabulary Development for Interpreters
 SLNG 2331 Interpreting III (*Summer Semester only*)
 SLNG 2387 Internship II – Sign Language Interpretation and Translation (Capstone) (*Summer Semester only*)

+ *American Sign Language courses are also transfer courses and may be used, at some institutions, to satisfy a Foreign Language requirement.*

Certificate Level 2 – ASL Studies

35 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

ENGL 1301 Composition I
 SGNL 1401 Beginning American Sign Language I +

SLNG 1215 Visual/Gestural Communication (*Fall Semester only*)
 SLNG 1347 Deaf Culture

Second Semester

SGNL 1402 Beginning American Sign Language II +
 SLNG 1207 Intra-lingual Skills Development for Interpreters (*Spring Semester only*)
 SPCH 1311 Introduction to Speech Communication (See [Speech](#) options)

Third Semester

SGNL 2301 Intermediate American Sign Language I +
 SLNG 1211 Fingerspelling and Numbers (*Summer Semester only*)
 SLNG 1321 Introduction to the Interpreting Profession (*Summer Semester only*)

SECOND YEAR

First Semester

SGNL 2302 Intermediate American Sign Language II +
 SLNG 1350 Sign-to-Voice (Capstone) (*Fall Semester only*)

+ *American Sign Language courses are also transfer courses and may be used, at some institutions, to satisfy a Foreign Language requirement.*

Certificate Level 3 – ESC – Interpreting in Medical Settings

7 credit hours

FIRST YEAR

First Semester

HIIT 1305 Medical Terminology I

Second Semester

SLNG 2189 ESC Internship – Sign Language Interpretation and Translation (Capstone)
 SLNG 2371 Interpreting in the Medical Setting

MARKETING

Department Website:

<http://www.collin.edu/department/marketing>

Program Options:

AAS – Marketing

Certificate Level 1 – Digital Marketing

Certificate Level 1 – Sales and Marketing

In marketing, creativity and business come together to create engaging messages designed to drive communications, involvement, and sales. With a marketing

education from Collin College, you will be prepared to participate in all types of work atmospheres, from retail or wholesale organizations to non-profits, governmental agencies, and academic institutions. Collin College's marketing program is designed to give you a thorough background in aspects of marketing if you are new to marketing and to provide methods for improving your skills if you are already employed in a marketing career. If you are in a program that requires a criminal background check, that check may have an impact on your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity. If you have any questions or concerns about background checks, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

Through transfer agreements, students may earn their Associate of Applied Science (AAS) degree in Marketing from Collin College and transfer to numerous universities in Texas where their Collin College courses may be applied toward Bachelor of Applied Arts and Science (BAAS) and Bachelor of Applied Technology (BAT) degrees. Any student planning to transfer to a college or university should check with the Collin College academic advisors. NOTE: You should check the degree requirements of your intended transfer college prior to beginning this program to verify course degree applicability.

Marketing incorporates professional education courses to prepare individuals for career paths with retail or wholesale organizations, profit or non-profit organizations, governmental agencies, and academic institutions. Collin College's Marketing program is designed to give a thorough background in aspects of marketing for students new to marketing and to provide methods for improving skills for people already employed in marketing careers.

AAS – Marketing

60 credit hours

The program highly recommends that you complete MRKG 1311 prior to taking any other Marketing course, or concurrently with your first Marketing courses.

FIRST YEAR

First Semester

BMGT 1327	Principles of Management
MRKG 1301	Customer Relationship Management
MRKG 1311	Principles of Marketing
MRKG 2333	Principles of Selling
<u>SPCH 1321</u>	<u>Business and Professional Communication</u> (See <u>Speech</u> options)

Second Semester

<u>ENGL 1301</u>	<u>Composition I</u>
IBUS 1354	International Marketing Management
MRKG 2312	e-Commerce Marketing

MRKG 2348	Marketing Research and Strategies
MRKG 2349	Advertising and Sales Promotion

SECOND YEAR

First Semester

BMGT 2303	Problem Solving and Decision Making
BUSG 2309	Small Business Management / Entrepreneurship
<u>MATH 1332</u>	<u>Contemporary Mathematics (Quantitative Reasoning)</u> ¹
MRKG 2371	Strategies in Social Media Marketing
MRKG 2372	Digital Marketing

Second Semester

BMGT 1341	Business Ethics
<u>ECON 1301</u>	<u>Introduction to Economics</u> ²
<u>GEN ED</u>	<u>Humanities/Fine Arts</u> course
MRKG 2373	Digital Marketing Analytics
MRKG 2381	Cooperative Education – Marketing / Marketing Management, General (Capstone) ³

1. May substitute MATH 1342 or see other Mathematics options
2. May substitute SOCI 1301 or see other Social/Behavioral Sciences options
3. May substitute BUSG 2371, with consent of Associate Dean/Director (prior to registering)

Certificate Level 1 – Digital Marketing

18 credit hours

The program highly recommends that you complete MRKG 1311 prior to taking any other Marketing course, or concurrently with your first Marketing courses.

FIRST YEAR

First Semester

MRKG 1311	Principles of Marketing
MRKG 2371	Strategies in Social Media Marketing
MRKG 2372	Digital Marketing

Second Semester

BMGT 1341	Business Ethics ¹
MRKG 2312	e-Commerce Marketing (Capstone)
MRKG 2373	Digital Marketing Analytics

1. May substitute BUSG 2309

Certificate Level 1 – Sales and Marketing

18 credit hours

The program highly recommends that you complete MRKG 1311 prior to taking any other Marketing course, or concurrently with your first Marketing courses.

FIRST YEAR

First Semester

MRKG 1301	Customer Relationship Management
MRKG 1311	Principles of Marketing
MRKG 2333	Principles of Selling

Second Semester

MRKG 2312 e-Commerce Marketing (Capstone)
 MRKG 2348 Marketing Research and Strategies ¹
 MRKG 2349 Advertising and Sales Promotion

1. May substitute BUSG 2309

MEDICAL ASSISTING ADVANCED PRACTICE**Department Website:**

www.collin.edu/departments/medicalassisting/

Program Options:

AAS – Medical Assisting (MA)

**Occupational Skills Award (OSA) – Medical Scribe
 Certificate Level 1 – Medical Assisting (MA)**

Medical Assistants can be hired in hospitals, clinics, urgent care facilities, and every specialty of doctor's offices. They are the most versatile of entry level medical professions. With the ever-changing reimbursement schedule from insurance companies to physicians and facilities, nurses are cost prohibitive in smaller health care settings. Industry trends show that more and more clinics, offices and health care providers are hiring Medical Assistants (MA) in lieu of nurses. MAs are expected to fill the role of front office staff, clinical assisting, phlebotomy, EKG technicians and to have general billing and coding knowledge. Students completing the MA program will have job opportunities across multiple healthcare facilities and specialties.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your Program Director and check with your licensing/certifying entity, if any, to determine your status.

The curriculum contains both transfer and workforce courses. The workforce courses are mainly offered at the Technical Campus and the Wylie Campus. For additional information, please contact Leon Deutsch, LDeutsch@collin.edu.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in "Functional Abilities/Core Performance Standards" documents provided in the program information and application forms. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to

contact the college ACCESS department as soon as this program is of interest.

ADDITIONAL ADMISSIONS REQUIREMENTS

In addition to meeting Collin College Admission Requirements, students would need to complete the following prior to acceptance to the program.

- Program Application and Interview
- Drug Screening
- Background Check
- TSI Exam. It is preferred that candidates will be TSI Complete.
- Attend one of the program information sessions.
- Provide Immunization Records
- Provide proof of health insurance prior to clinicals.

After Admission:

In order to graduate from the program, students must successfully complete each course in the program with a grade of C or better. Students must also complete at least 160 clinical (externship) hours in a physician's office as assigned by the college.

Prior to enrolling in any clinical courses, students must complete all immunizations required by the Texas Department of State Health Services (TDSHS)*. All required workforce courses require a minimum grade of 75% to continue in the program.

** It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.*

Health Insurance - All Health Profession students are required to show proof of health insurance prior to starting clinical rotations each semester.

CPR - Requires current American Heart Association Basic Life Support CPR certification.

AAS – Medical Assisting (MA)

60 credit hours

FIRST YEAR**First Semester**

<u>BIOL</u>	<u>2404</u>	<u>Human Anatomy and Physiology Basic</u> (See Natural Sciences options)
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
HPRS	1201	Introduction to Health Professions ¹
HPRS	2232	Health Care Communications
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)

Second Semester

HPRS 2301	Pathophysiology
MDCA 1210	Medical Assistant Interpersonal and Communication Skills
MDCA 1309	Anatomy and Physiology for Medical Assistants
MDCA 1417	Procedures in a Clinical Setting
<u>GEN ED</u>	Humanities/Fine Arts course

Third Semester

HITT 2328	Introduction to Public Health
<u>MATH 1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)

SECOND YEAR**First Semester**

HPRS 2321	Medical Law and Ethics for Health Professionals
MDCA 1321	Administrative Procedures
MDCA 1448	Pharmacology & Administration of Medications
MDCA 1452	Medical Assistant Laboratory Procedures

Second Semester

HPRS 1303	End of Life Issues
MDCA 1254	Medical Assisting Credentialing Exam Review
MDCA 1360	Clinical – Medical/Clinical Assistant

Third Semester

HPRS 2310	Basic Health Profession Skills II (Capstone)
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1. May substitute HPRS 1204

Occupational Skills Award (OSA) – Medical Scribe

12 credit hours

FIRST YEAR**First Semester**

HITT 1305	Medical Terminology I
HPRS 2321	Medical Law and Ethics for Health Professionals
MDCA 1309	Anatomy and Physiology for Medical Assistants ¹
MDCA 1321	Administrative Procedures

1. May substitute BIOL 2404

Certificate Level 1 - Medical Assisting (MA)

31 credit hours

FIRST YEAR**First Semester**

HPRS 2301	Pathophysiology
MDCA 1210	Medical Assistant Interpersonal and Communication Skills

MDCA 1309	Anatomy and Physiology for Medical Assistants
MDCA 1417	Procedures in a Clinical Setting

Second Semester

HPRS 2321	Medical Law and Ethics for Health Professionals
MDCA 1321	Administrative Procedures
MDCA 1448	Pharmacology & Administration of Medications
MDCA 1452	Medical Assistant Laboratory Procedures

Third Semester

MDCA 1254	Medical Assisting Credentialing Exam Review
MDCA 1360	Clinical – Medical/Clinical Assistant (Capstone)

METAL ARTS

Also see [Welding](#).

Program Options:**AAS – Metal Arts****Occupational Skills Award (OSA) – Metalsmithing & Casting****Certificate Level 1 – Foundry****Certificate Level 1 – Metal Sculpture****Certificate Level 2 – Metal Arts**

Metal Arts is a craft that is highly valued in both the industrial and the artistic worlds. Metal Arts Welders who graduate from Collin College's program will be prepared to earn a job or go into business for themselves, providing a service that is always in high demand.

Collin College offers an associate of applied science in Metal Arts, an OSA in metalsmithing, two level 1 certificates, and one level 2 certificate. The AAS will allow you to earn a degree in Metal Arts, while the certificates are designed to qualify you in specific processes such as Metalsmithing, Foundry, Metal Sculpture, and Metal Arts.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

The Metal Arts program will be housed at the Technical Campus. The department has a foundry and TIG, MIG and stick welders.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer

college prior to beginning this program to verify course degree applicability.

AAS – Metal Arts

60 credit hours

FIRST YEAR

First Semester

WLDG 1308	Metal Sculpture
WLDG 1371	Introduction to Metal Casting
WLDG 1401	Metalsmithing
WLDG 1405	Art Metals

Second Semester

WLDG 1407	Introduction to Welding Using Multiple Processes
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)
WLDG 1430	Introduction to Gas Metal Arc Welding (GMAW)
WLDG 1434	Introduction to Gas Tungsten Arc (GTAW) Welding

SECOND YEAR

First Semester

<u>GEN ED</u>	Humanities/Fine Arts course
WLDG 2447	Advanced Gas Metal Arc Welding (GMAW)
ARTS 2326	Sculpture
WLDG 2471	Advanced Metal Casting

Second Semester

<u>ENGL 1301</u>	Composition I
<u>GEN ED</u>	Social/Behavioral Sciences course
<u>SPCH 1321</u>	Business and Professional Communication (See Speech options)
<u>GEN ED</u>	Mathematics course
WLDG 2440	Advanced Metal Sculpture ¹ (Capstone)

1. May substitute WLDG 2480 with consent of Associate Dean/Director

Occupational Skills Award (OSA) – Metalsmithing & Casting

14 credit hours

FIRST YEAR

First Semester

WLDG 1401	Metalsmithing
WLDG 1405	Art Metals (Capstone)
WLDG 1308	Metal Sculpture
WLDG 1371	Introduction to Metal Casting

Certificate Level 1 – Metal Casting

26 credit hours

FIRST YEAR

First Semester

WLDG 1371	Introduction to Metal Casting
WLDG 1407	Introduction to Welding Using Multiple Processes
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)
WLDG 1430	Introduction to Gas Metal Arc Welding (GMAW)

Second Semester

WLDG 1434	Introduction to Gas Tungsten Arc (GTAW) Welding
ARTS 2326	Sculpture
WLDG 2471	Advanced Metal Casting (Capstone)

Certificate Level 1 – Metal Sculpture

26 credit hours

FIRST YEAR

First Semester

WLDG 1308	Metal Sculpture
WLDG 1407	Introduction to Welding Using Multiple Processes
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMW)
WLDG 1430	Introduction to Gas Metal Arc Welding (GMAW)

Second Semester

WLDG 1434	Introduction to Gas Tungsten Arc (GTAW) Welding
ARTS 2326	Sculpture
WLDG 2440	Advanced Metal Sculpture ¹ (Capstone)

1. May substitute WLDG 2480 with consent of Associate Dean/Director

Certificate Level 2 – Metal Arts

45 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

WLDG 1308	Metal Sculpture
WLDG 1371	Introduction to Metal Casting
WLDG 1401	Metalsmithing
WLDG 1405	Art Metals

Second Semester

WLDG 1407	Introduction to Welding Using Multiple Processes
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)

WLDG 1430	Introduction to Gas Metal Arc Welding (GMAW)
WLDG 1434	Introduction to Gas Tungsten Arc (GTAW) Welding

SECOND YEAR

First Semester

WLDG 2447	Advanced Gas Metal Arc Welding (GMAW)
WLDG 2440	Advanced Metal Sculpture ¹ (Capstone)
ARTS 2326	Sculpture
WLDG 2471	Advanced Metal Casting

1. May substitute WLDG 2480 with consent of Associate Dean/Director

MUSIC, COMMERCIAL

Also see [Associate of Arts – Music Field of Study](#).

Department Website:

<http://www.collin.edu/department/music>

Program Options:

AAS – Commercial Music

Certificate Level 1 – Audio Engineering

- *Studio Track*
- *Live Sound Track*

Certificate Level 2 – Music Business

Picture yourself at the board, turning up the bass and down the mid-range, capturing the vocals of the hottest new artist on the charts. Collin College's Commercial Music program provides career training in performance, audio engineering, sound reinforcement, electronic music, composition and songwriting.

The Associates of Applied Science (AAS) in Commercial Music is a broader two-year degree which includes general education and traditional music courses beyond the courses in music business or audio engineering. You can earn an Associate of Applied Science or one of a pair of certificates which fold into the AAS.

The audio engineering certificate has two tracks. The Studio Track focuses on recording, mixing and mastering. The Live Sound Track focuses on designing, setting up and running sound reinforcement for live events. The courses concentrate on building the skills necessary to successfully work in the music industry as either a mixing engineer or live sound engineer.

The music business certificate addresses the demands for working in the music industry in marketing and management positions such as artist promotions, concerts and tours, merchandising, social networking, etc.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Commercial Music

60 credit hours

FIRST YEAR

First Semester

MUSB 1305	Survey of the Music Business
MUSC 1327	Audio Engineering I
MUSC 1331	MIDI I
MUSI 1303	Fundamentals of Music

Second Semester

ENGL 1301	Composition I
MUSC 1313	Commercial Music Theory I
MUSC 2427	Audio Engineering II
SPCH 1321	<u>Business and Professional Communication</u> (See Speech options)

ELECTIVE *

SECOND YEAR

First Semester

MUSB 2301	Music Marketing
MUSC 2471	Audio Plugins
MUSP 1113	Introductory Group Piano I ¹
<u>GEN ED</u>	Mathematics/Natural Sciences course
ELECTIVE *	
ELECTIVE *	

Second Semester

MUSB 2350	Commercial Music Project (Capstone) ²
MUSC 1405	Live Sound I
MUSC 2351	Audio for Video
<u>MUSI 1310</u>	American Music ³
MUSP 1114	Introductory Group Piano II ⁴
<u>GEN ED</u>	Social/Behavioral Sciences course

Audio Engineering courses (MUSC 1327, MUSC 2427, MUSC 2447 and MUSC 2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above may need to take the courses in the eight-week format in order to meet the prerequisite requirements.

** Electives (minimum of 7 credit hours) Students may choose from any/all categories if not used in degree requirements:*
Music Performance: Any MUAP, any MUEN, Any MUSP, MUSI 1181, MUSI 1182, MUSI 1183, MUSI 1192, MUSI 2181, MUSI 2182, MUSC 1209 (courses may have co-requisites)
Music Theory: MUSC 2313, MUSC 2314, MUSI 1312, MUSI 2311, MUSI 2312
Sight Singing and Ear Training: MUSI 1116, MUSI 1117, MUSI 2116, MUSI 2117
Music Composition / Arranging: MUSC 1321, MUSC 2330, MUSC 2356

Music Business: MUSB 1341, MUSB 2345, MUSB 2355, MUSB 2380

Audio Engineering: MUSC 1323, MUSC 1333, MUSC 2345, MUSC 2355, MUSC 2403, MUSC 2447, MUSC 2448, MUSC 2453

1. May substitute MUSI 1181 or MUSP 1110, departmental permission required
2. May substitute MUSB 2380, departmental permission required
3. Required to fulfill the Humanities/Fine Arts requirement – May substitute MUSI 1306 or MUSI 1307
4. May substitute MUSI 1182, MUSP 1110, or MUSP 2235, departmental permission required

Certificate Level 1 – Audio Engineering Studio Track

35 credit hours

FIRST YEAR

First Semester (Summer)

MUSC 1327 Audio Engineering I

Second Semester

MUSB 1305 Survey of the Music Business
 MUSB 2301 Music Marketing
 MUSC 1405 Live Sound I
 MUSC 2427 Audio Engineering II
 MUSC 1331 MIDI I

Third Semester

MUSC 1323 Audio Electronics
 MUSC 2471 Audio Plugins
 MUSC 2447 Audio Engineering III
 MUSC 2448 Audio Engineering IV (Capstone)

Audio Engineering courses (MUSC 1327, MUSC 2427, MUSC 2447 and MUSC 2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above would need to take the courses in the eight-week format in order to meet the prerequisite requirements.

Certificate Level 1 – Audio Engineering Live Sound Track

31 credit hours

FIRST YEAR

First Semester

MUSC 1327 Audio Engineering I
 MUSC 1405 Live Sound I

Second Semester

MUSB 1305 Survey of the Music Business
 MUSB 1341 Concert Promotion and Venue Management
 MUSC 2403 Live Sound II

Third Semester

MUSC 1323 Audio Electronics
 MUSC 1331 MIDI I

MUSC 2427 Audio Engineering II
 MUSC 2453 Live Sound III (Capstone)

Audio Engineering courses (MUSC 1327 and MUSC 2427) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above would need to take the courses in the eight-week format in order to meet the prerequisite requirements.

Certificate Level 2 – Music Business

33 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

MUSB 1305 Survey of the Music Business

Second Semester

MUSB 1341 Concert Promotion and Venue Management
 MUSB 2301 Music Marketing
 MUSC 1327 Audio Engineering I
 MUSI 1310 American Music
SPCH 1321 Business and Professional Communication (See [Speech](#) options)

Third Semester

MUSB 2345 Live Music and Talent Management
 MUSB 2350 Commercial Music Project (Capstone)
 MUSC 1331 MIDI I
 ELECTIVE *
 ELECTIVE *

** Electives (minimum of 6 credit hours): MUSB 2355, MUSB 2380, MUSC 1321, MUSC 1405, MUSC 2355, MUSC 2356 or MUSC 2427*

NURSING (RN)

Department website:

<http://www.collin.edu/nursing>

Program Options:

AAS – Nursing (RN)

AAS – LVN to RN Bridge Program

A career in nursing will make a difference in your own life and the lives of others. Pursuing your nursing degree at Collin College is a great way to start.

Collin College's Associate Degree Nursing (ADN) program prepares students for a career as a professional registered nurse in this quickly-growing field with state-of-the-art facilities and educators who have years of practical experience working in health care. Collin College has been recognized as a Center of Excellence in Nursing Education by the National League for Nursing (NLN) since 2011,

one of only a handful of community colleges in the nation to earn that honor.

The concept-based nursing curriculum is designed for deep learning so that you develop higher-level clinical judgment. The curriculum divides nursing concepts into two categories – health care concepts and professional nursing concepts – which are learned in the classroom and then applied in practical settings like the health sciences simulation labs in the Cary A. Israel Health Sciences Center, as well as in local health care facilities where students complete clinical rotations.

The nursing curriculum is approved by the Texas Board of Nursing (Texas BON) and accredited by the Accreditation Commission for Education in Nursing (ACEN). Upon graduation, Collin College's ADN program students are ready to apply to the Texas BON for licensure as a registered nurse (RN) through the NCLEX-RN examination.

The college also offers a bridge program for LVNs, allowing for faster degree completion to begin your career as a professional registered nurse earlier.

Licensure Notice: Students who have been involved with the criminal system, are advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

If an individual has reason to believe he/she is ineligible for licensure, he/she may petition the Texas BON for a declaratory order. Upon application to the nursing program, you must show your eligibility to take the NCLEX-RN exam through outcomes letter that will be issued by the Texas BON if the declaratory order is approved. To check your eligibility, please review the following questions. If you answer “yes” to any one of the following questions, you must have the declaratory order from the Texas BON completed prior to applying to the nursing program.

- Have you ever been convicted of a misdemeanor (other than a class C misdemeanor traffic violation)?
- Have you ever been convicted of a felony?
- Have you ever pled nolo contendere, no contest, or guilty?
- Have you ever received deferred adjudication?
- Have you ever been placed on community supervision or court-ordered probation, whether or not adjudicated guilty?

- Have you ever been sentenced to serve jail or prison time or court-ordered confinement?
- Have you ever been granted pre-trial diversion?
- Have you ever been arrested or have any pending criminal charges?
- Have you ever been cited or charged with any violation of the law?
- Have you ever been subject of a court-martial; Article 15 violation; or received any form of military judgment, punishment, or action?

Contact the Nursing Department for further information.

Collin County healthcare facilities support the ADN program. Several healthcare facilities throughout the Metroplex are used for the clinical experience.

Students planning to transfer to a college or university should check with Collin College academic advisors and are encouraged to check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information on the Nursing website <http://www.collin.edu/nursing>. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION

The Nursing Program is fully accredited by the Accreditation Commission for Education in Nursing (ACEN). They may be contacted at:

Accreditation Commission for Education in Nursing
(ACEN)
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326
(404) 975-5000
www.acenursing.org

SCHOLARSHIPS

Various scholarships are available to students when they have been accepted into the Nursing Program. Most scholarships are awarded based on financial need. Other types of monetary support are available through the college's Financial Aid Office.

ADDITIONAL ADMISSIONS REQUIREMENTS

Admission to the Nursing Program is selective. Admission to the college does not guarantee admission to the Nursing Program. Registration is by permission only. Information and applications may be obtained from the Nursing Office or the Nursing website: <http://www.collin.edu/nursing>.

- Complete pre-entrance course requirements with a minimum 2.5 GPA
- Earn a grade of “C” or better in all courses applicable to the Nursing program
- Submit official copies of all college transcripts to include Collin College
- Complete an entrance exam prior to the Jan. 31st, March 31st or Aug. 31st deadline (see nursing website)
- Successful completion of drug screen, background check and physical exam
- Submit a current American Heart Association CPR for Health Care workers
- Provide documentation of a current negative TB test
- Complete a declaratory order from the Texas BON, if needed
- Show positive titer immunizations required by the Texas Department of State Health Services (TDSHS) *

* *It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Clinical Coordinator.*

Health Insurance – All nursing students are required to show proof of health insurance prior to starting clinical rotations each semester.

Placement in mathematics and English courses is based upon the results of each student’s assessments and subjects completed before admission.

AAS – Nursing (RN)

60 credit hours

PREREQUISITES

BIOL	2401	<u>Anatomy and Physiology I</u> ¹
BIOL	2402	<u>Anatomy and Physiology II</u> ¹
BIOL	2420	Microbiology for Non-Science Majors

FIRST YEAR

First Semester

PSYC	2301	<u>General Psychology</u> ¹
RNSG	1125	Professional Nursing Concepts I
RNSG	1128	Introduction to Health Care Concepts
RNSG	1161	Clinical I – Nursing – Registered Nurse Training
RNSG	1216	Professional Nursing Competencies
RNSG	1430	Health Care Concepts I

Second Semester

PSYC	2314	Life-Span Growth and Development
RNSG	1126	Professional Nursing Concepts II
RNSG	1533	Health Care Concepts II
RNSG	2361	Clinical II – Nursing – Registered Nurse Training

SECOND YEAR

First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
RNSG	1137	Professional Nursing Concepts III
RNSG	1538	Health Care Concepts III
RNSG	2362	Clinical III – Nursing – Registered Nurse Training

Second Semester

RNSG	2138	Professional Nursing Concepts IV (Capstone)
RNSG	2363	Clinical IV – Nursing – Registered Nurse Training
RNSG	2539	Health Care Concepts IV
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

1. *No course substitutions*

AAS – LVN to RN Bridge Program

60 credit hours

Pre-Admission/Pre-Program Requirements

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> ¹
<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u> ¹
BIOL	2420	Microbiology for Non-Science Majors ²
PSYC	<u>2301</u>	<u>General Psychology</u> ¹

Nursing faculty will determine the application and approval process.

First semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
RNSG	1128	Introduction to Health Care Concepts
RNSG	1163	Clinical I – Transitional Registered Nursing/Registered Nurse
RNSG	1216	Professional Nursing Competencies
RNSG	1301	Pharmacology
RNSG	1424	Concept-Based Transition to Professional Nursing Practice

Upon successful completion of Semester I, the student will be awarded an additional 7 hours of articulated credit for RNSG 1125, RNSG 1126, RNSG 1161, and RNSG 1430, to complete the 60 credit hours of the Associate Degree Nursing program curriculum.

Second semester

PSYC	2314	Life-Span Growth and Development
RNSG	1137	Professional Nursing Concepts III
RNSG	1538	Health Care Concepts III
RNSG	2362	Clinical III – Nursing – Registered Nurse Training

Third semester

RNSG	2138	Professional Nursing Concepts IV (Capstone)
RNSG	2363	Clinical IV – Nursing – Registered Nurse Training
RNSG	2539	Health Care Concepts IV
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

1. No course substitutions
2. May substitute BIOL 2421

PARALEGAL/LEGAL ASSISTANT**Program Options:****AAS – Paralegal / Legal Assistant****Certificate Level 2 – Paralegal General**

Collin College's Paralegal Program is approved by the American Bar Association (ABA).

If you are interested in a legal career in law, Collin College's Paralegal/Legal Assistant program is an excellent starting point and is approved by the American Bar Association.

Law firms, corporations and governmental agencies hire paralegals/legal assistants to perform a wide variety of legal tasks under the direction and supervision of a licensed attorney. For example, paralegals investigate cases, interview witnesses and draft documents such as wills, contracts and court papers. As a result, paralegals must be proficient in computer skills, legal terminology and legal procedures. Collin College's Associate of Applied Science degree in Paralegal/Legal Assistant Studies provides excellent training in these areas and offers opportunities for specialization.

Not only is this career path interesting; it is growing at a fast pace. According to the U.S. Bureau of Labor Statistics, employment of paralegals and legal assistants is projected to grow 12 percent from 2018 to 2028, much faster than the average for all occupations.

This program trains students to become paralegals and legal assistants and helps them prepare for a national certification examination. The program does not qualify a graduate to take a state bar exam, represent clients in court, or give legal advice. Paralegals may not provide legal services directly to the public, except as permitted by law. Admission to the Paralegal/Legal Assistant program is open to all students. Students with a prior degree may be eligible for admission to the Level II Paralegal General Certificate program. For more information about eligibility, please see the certificate pre-entrance requirements.

Paralegal Program Goals

Consistent with the core values of the district, the mission of the paralegal studies program is to further the paralegal profession by providing specialized training and education in law and legal procedure that will produce graduates who are prepared to enter the legal workforce with sufficient technology skills and a firm understanding of the ethical responsibilities of the attorney and paralegal.

The goals of the paralegal program are:

1. The program will reflect a diverse student body.
2. The program will produce graduates who possess the legal knowledge and technology skills necessary to qualify them for employment in a legal work environment.
3. The program will produce graduates who demonstrate an understanding of their ethical responsibility in the legal profession.
4. The program will emphasize written communication skills.
5. The program will promote opportunities to service the needs of the local community and encourage *pro bono* and public interest causes.

Texas Woman's University (TWU) and Collin College Paralegal/Legal Assistant programs entered an articulation agreement effective Fall 1999, which establishes a plan for students to obtain an AAS degree from Collin College and a Bachelor of Science in Government – Legal Studies Emphasis degree from TWU. Collin College established a similar articulation agreement with Texas A&M University-Commerce, effective Fall 2004, for the Bachelor of Arts/Science in Political Science with Emphasis in Paralegal Studies degree.

Admission to the Paralegal/Legal Assistant Associate of Applied Science Program is open to all students. Students with a prior degree **may be** eligible for admission to the Level II Paralegal General Certificate program. See certificate pre-entrance requirements.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Paralegal / Legal Assistant

60 credit hours ¹

FIRST YEAR**First Semester**

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>LGLA</u>	<u>1307</u>	Introduction to Law and the Legal Professions
<u>LGLA</u>	<u>1370</u>	Introduction to Legal Conventions
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> ²

Second Semester

<u>GOVT</u> 2305	<u>Federal Government (Federal constitution and topics)</u> ³ (See Social/Behavioral Sciences options)
LGLA 1303	Legal Research
LGLA 2303	Torts and Personal Injury Law
LGLA 2333	Advanced Legal Document Preparation

Third Semester

ENGL 1302	Composition II
LGLA 1345	Civil Litigation
LGLA 1351	Contracts
<u>PHIL</u> 2303	<u>Introduction to Formal Logic</u> ⁴ (See Humanities/Fine Arts options)

SECOND YEAR**First Semester**

LGLA 1305	Legal Writing
LGLA 1355	Family Law
LGLA 2311	Business Organizations
<u>GEN ED</u>	Speech course

Second Semester

LGLA 1353	Wills, Trusts and Probate Administration
LGLA 2339	Certified Paralegal Exam Review (Capstone) ⁵
ELECTIVE *	
ELECTIVE *	

* *Electives (6 credit hours): LGLA 1323, LGLA 1343, LGLA 1380, LGLA 2307, LGLA 2309, LGLA 2313, or LGLA 2323.*

1. *These hours include 42 credit hours of LGLA courses, at least nine credit hours of which must be in synchronous format.*
2. *May substitute MATH 1316, MATH 1332, MATH 1342, MATH 2320, MATH 2412, MATH 2413, MATH 2414, or MATH 2415.*
3. *GOVT 2305, or GOVT 2306, is strongly preferred.*
4. *Recommended for students planning to take the LSAT.*
5. *Students should contact the National Association of Legal Assistants (NALA) for current exam eligibility requirements.*

Certificate Level 2 – Paralegal General

36 credit hours ¹

Students must be TSI complete.

Pre-Entrance Requirements

Admission to the college or the degree program does not guarantee admission to the Paralegal General Certificate Program. Prior to admission to the certificate program, students must provide official documentation showing that they have earned a Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Associate of Arts,

Associate of Science, or Associate of Arts for Teaching degree to demonstrate that they have met the American Bar Association requirements of having successfully developed critical reasoning, writing skills, and oral communication skills by completing at least eighteen semester credits of general education courses.

First Semester

LGLA 1307	Introduction to Law and the Legal Professions
LGLA 1345	Civil Litigation
LGLA 1370	Introduction to Legal Conventions
LGLA 2333	Advanced Legal Document Preparation

Second Semester

LGLA 1303	Legal Research
LGLA 1305	Legal Writing
LGLA 2303	Torts and Personal Injury Law
ELECTIVE *	

Third Semester

LGLA 1351	Contracts
LGLA 2311	Business Organizations
LGLA 2339	Certified Paralegal Exam Review (Capstone) ²
ELECTIVE *	

* *Electives (6 credit hours): LGLA 1323, LGLA 1343, LGLA 1353, LGLA 1355, LGLA 1380, LGLA 2307, LGLA 2309, LGLA 2313, or LGLA 2323*

1. *These hours include 36 credit hours of LGLA courses, at least nine credit hours of which must be in synchronous format.*
2. *Students should contact the National Association of Legal Assistants (NALA) for current exam eligibility requirements.*

PASTRY ARTS

Also see [Culinary Arts](#).

Department Website:

<http://www.collin.edu/departments/ihce/index.html>

Program Options:

AAS – Pastry Arts

Certificate Level 1 – Pastry Arts

Certificate Level 3 – ESC – Advanced Pastry Arts

Sweet! Learn how to build a career of creating delectable delights with Collin College's Pastry Arts program. Once you complete the Pastry Arts program, you will be qualified for a variety of bakery positions in the food service industry.

A part of the college's Institute of Hospitality and Culinary Education (IHCE), Collin College's Pastry Arts program emphasizes a broad selection of hands-on food

preparation courses, building on baking and pastry foundation skills that will allow you to be effective in a commercial bakeshop environment. The curriculum is designed by industry experts and taught by experienced pastry professionals, as well as being fully accredited by the American Culinary Federation Education Foundation.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

TRANSFER

Students planning to transfer to a college or university should check with a Collin College academic advisor. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

ACCREDITATION

The Culinary Arts Program is fully accredited by the American Culinary Federation Education Foundation.

They may be contacted at:

180 Center Place Way
St. Augustine, FL 32095
800.624.9458
<http://www.acfchefs.org>

ADMISSION REQUIREMENTS

Students are required to attend mandatory Pastry Arts Orientation. Please visit the program website (<http://www.collin.edu/department/ihce/>) for dates and times.

Note: Pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

AAS – Pastry Arts

60 credit hours

An American Culinary Federation (ACF) accredited program. Students will be eligible for Certified Pastry Culinarian (CPC) upon graduation.

FIRST YEAR

First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety ^{1,2}
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
HAMG	1321	Introduction to Hospitality Industry
PSTR	1301	Fundamentals of Baking

Second Semester

IFWA	1310	Nutrition and Menu Planning
<u>MATH</u>	<u>1332</u>	<u>Contemporary Mathematics (Quantitative Reasoning)</u> (See Mathematics options)
PSTR	1305	Breads and Rolls
PSTR	1310	Pies, Tarts, Teacakes and Cookies
RSTO	1325	Purchasing for Hospitality Operations

Third Semester

PSTR	1306	Cake Decorating I
<u>GEN ED</u>		Humanities/Fine Arts course

SECOND YEAR

First Semester

HAMG	1324	Hospitality Human Resources Management
PSTR	2301	Chocolates and Confections
PSTR	2307	Cake Decorating II
<u>GEN ED</u>		Social/Behavioral Sciences course

Second Semester

PSTR	2331	Advanced Pastry Shop (Capstone)
PSTR	2380	Cooperative Education – Baking and Pastry Arts/Baker/Pastry Chef
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)
ELECTIVE *		

** Elective (3 credit hours): CHEF 2331, HAMG 1313, HAMG 1340, HAMG 2301, HAMG 2332, HAMG 2337, RSTO 2307, TRVM 2301 or PSTR 1364*

1. Certification in ServSafe
2. Certification in Food Protection Management

Many courses are taught in an eight-week format.

Certificate Level 1 – Pastry Arts

24 credit hours

FIRST YEAR

First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety ^{1,2}
IFWA	1310	Nutrition and Menu Planning
PSTR	1301	Fundamentals of Baking

Second Semester

PSTR	1305	Breads and Rolls
PSTR	1306	Cake Decorating I
PSTR	1310	Pies, Tarts, Teacakes and Cookies (Capstone)
PSTR	2301	Chocolates and Confections

1. Certification in ServSafe
2. Certification in Food Protection Management

Many courses are offered in eight-week express sessions.

Certificate Level 3 – ESC – Advanced Pastry Arts

12 credit hours

ADVANCED PASTRY ARTS COURSES

First Semester

PSTR	1312	Laminated Dough, Pate a Choux and Donuts
PSTR	1340	Plated Desserts

Second Semester

PSTR	1342	Quantity Bakeshop Production (Capstone)
PSTR	1343	Bakery Operations and Management

PHARMACY TECHNICIAN

Department Website:

<http://www.collin.edu/departments/pharmtech/>

Program Options:

AAS – Pharmacy Technician

Occupational Skills Award (OSA) – Pharmacy Technician

Certificate Level 1 – Pharmacy Technician

The Pharmacy Technician Program orients students to the work of various pharmacy settings and the context in which their work is performed. An overview of the pharmacokinetics & pharmacodynamics associated with prescription and OTC medications is provided. Students are introduced to the profound influence that federal and state laws and regulation have on practice. Commonly encountered ethical dilemmas are explored in this program. Students will perform drug dosage conversions and calculations. The program contains opportunities for hands on labs to allow students to simulate preparing various forms of medications. Upon successful completion of the program, students should have attained the skills to prepare them to take the Pharmacy Technician Certification Exam, if they choose to. Additionally, the Pharmacy Technician program will provide a basic foundation and understanding of pharmaceuticals that any student pursuing higher level education in the Healthcare field may benefit from.

ADMISSIONS/GRADUATION REQUIREMENTS

Students enrolling in courses for the Pharmacy Technician program adhere to the same admission, curriculum and graduation requirements as do students enrolling in other Collin College open enrollment programs. In addition, students wishing to enroll in this program will need to complete the following prior to acceptance to the program:

- Program Application and Interview
- Drug Screening

- Background check
- TABE Testing: It is highly recommended students score at least a 10 on the Test of Adult Basic Education prior to starting the Pharmacy Technician program.

Grading, transcripts and transfer policies are the same for all students at Collin College.

The Associate of Applied Science (AAS) Degree in Pharmacy Technician will be awarded to students who meet the following graduation requirements:

- Earn a minimum of 60 credit hours (excluding Developmental Credit).
- Complete 22 credit hours of general education.
- Complete a minimum of 38 credit hours of recommended courses per approved curriculum, including prerequisites, with a grade of 75% or better.
- Must complete clinical hours (externship) in a retail pharmacy as assigned by the college.
- Earn a minimum of 15 credit hours in residency at Collin College.
- Earn a minimum cumulative GPA of 2.0.
- Complete State of Texas college readiness requirements.

The Level 1 Pharmacy Technician Certificate will be awarded to students who meet the following graduation requirements:

- Earn a minimum of 29 credit hours of recommended courses per approved curriculum, including 25% from Collin College to meet residency requirements.
- Must complete clinical hours (externship) in a retail pharmacy as assigned by the college.
- Earn a minimum cumulative GPA of 2.0.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information on the Program website. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

SCHOLARSHIPS

Various scholarships are available to students when they have been accepted into the Pharmacy Technician Program. Most scholarships are awarded based on financial

need. Other types of monetary support are available through the college's Financial Aid Office.

Health Insurance – All Pharmacy Technician students are required to show proof of health insurance prior to starting clinical rotations each semester.

Placement in Mathematics and English courses is based upon the results of each student's assessments and subjects completed before admission.

AAS – Pharmacy Technician

60 credit hours

General Education courses may be taken during any semester.

FIRST YEAR

First Semester

PHRA 1201	Introduction to Pharmacy
PHRA 1205	Drug Classification
PHRA 1209	Pharmaceutical Mathematics I
PHRA 1260	Clinical – Pharmacy Technician/Assistant
PHRA 1313	Community Pharmacy Practice
PHRA 1349	Institutional Pharmacy Practice

Second Semester

HITT 1305	Medical Terminology I
HPRS 1201	Introduction to Health Professions ¹
HPRS 2301	Pathophysiology
PHRA 1102	Pharmacy Law
PHRA 1347	Pharmaceutical Mathematics II

Third Semester

PHRA 1160	Clinical – Pharmacy Technician/Assistant
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SECOND YEAR

First Semester

<u>BIOL 1406</u>	<u>Biology for Science Majors I</u> ²
<u>ENGL 1301</u>	<u>Composition I</u>
PHRA 1243	Pharmacy Technician Certification Review (Capstone)
PHRA 1441	Pharmacy Drug Therapy and Treatment
PHRA 1445	Compounding Sterile Preparations

Second Semester

BIOL 1407	Biology for Science Majors II ³
<u>GEN ED</u>	<u>Humanities/Fine Arts</u> course
MATH 1342	Elementary Statistical Methods (See <u>Mathematics</u> options)
<u>PSYC 2301</u>	<u>General Psychology</u> ⁴
<u>SPCH 1321</u>	<u>Business and Professional Communication</u> (See <u>Speech</u> options)

1. May substitute HPRS 1204

2. May substitute BIOL 2401, BIOL 2416, BIOL 2421, CHEM 1411, or CHEM 2423

3. May substitute BIOL 2402, CHEM 1412, or CHEM 2425

4. May substitute ANTH 2302, ANTH 2346, ANTH 2351, HIST 1302, HIST 2301, SOCI 1301 or SOCI 1306

Occupational Skills Award (OSA) – Pharmacy Technician

14 credit hours

FIRST YEAR

First Semester

PHRA 1201	Introduction to Pharmacy
PHRA 1205	Drug Classification
PHRA 1209	Pharmaceutical Mathematics I
PHRA 1260	Clinical – Pharmacy Technician/Assistant
PHRA 1313	Community Pharmacy Practice
PHRA 1349	Institutional Pharmacy Practice

Certificate Level 1 – Pharmacy Technician

29 credit hours

FIRST YEAR

First Semester

PHRA 1201	Introduction to Pharmacy
PHRA 1205	Drug Classification
PHRA 1209	Pharmaceutical Mathematics I
PHRA 1260	Clinical – Pharmacy Technician/Assistant
PHRA 1313	Community Pharmacy Practice
PHRA 1349	Institutional Pharmacy Practice

Second Semester

HITT 1305	Medical Terminology I
HPRS 1201	Introduction to Health Professions ¹
HPRS 2301	Pathophysiology
PHRA 1102	Pharmacy Law
PHRA 1347	Pharmaceutical Mathematics II

Third Semester

PHRA 1160	Clinical – Pharmacy Technician/Assistant
PHRA 1243	Pharmacy Technician Certification Review (Capstone)

1. May substitute HPRS 1204

PHOTOGRAPHY, COMMERCIAL

See [Photography area of study](#) for academic transfer coursework.

Department Website:

<http://www.collin.edu/department/photography/>

Program Options:**AAS – Commercial Photography****Certificate Level 1 – Studio Production****Certificate Level 2 – Commercial Photography Specialist**

If photography is your passion, turn it into a career at Collin College. Collin College's Commercial Photography program is an excellent path to obtain the skills and professionalism necessary to start your career as a commercial photographer. Learn techniques and technology from experienced photographers who know the industry and can guide your development as a commercial photographer.

Collin College's Photography program offers certificates and/or a degree plan with the goal of preparing students to enter the commercial photography workforce. In order to maintain a high level of excellence, the program works closely with an advisory board of professional photographers, seeking advice, recommendations, and internships. Studies include a variety of commercial shooting styles, with emphasis on natural, studio, and location lighting, management of a commercial studio, and the skills to assist professional photographers, art directors, and stylists. The department's facility includes a digital lab, a darkroom, 2-bay lighting studio, alternative process lab, book binding lab, and a large format digital printing lab. All studios are supplied with quality equipment corresponding to the industry standard of professional studios. Additionally, the department maintains equipment for students to check out, including digital cameras, film cameras, location lights and accessories. Complete your college experience enrolled in a college supervised Internship with a professional photography studio. After two years students will have not only obtained the skills and knowledge to enter the field of Commercial Photographer; additionally, students gain real-world experience, establish contacts in the commercial field and gain confidence to make a place in the world of commercial photography.

AAS – Commercial Photography

60 credit hours

FIRST YEAR**First Semester**

PHTC	1311	Fundamentals of Photography
ARTS	1313	<u>Foundations of Art</u> (See Humanities/Fine Arts options)
SPCH	1321	<u>Business and Professional Communication</u> (See Speech options)

GEN ED [Mathematics/Natural Sciences](#) course
TECHNICAL COURSE ¹

Second Semester

ENGL	1301	<u>Composition I</u>
PHTC	1300	Photo Digital Imaging I
PHTC	1353	Portraiture I
PHTC	2331	Architectural Photography
PHTC	1341	Color Photography I

SECOND YEAR**First Semester**

SOCI	1301	<u>Introduction to Sociology</u> (See Social/Behavioral Sciences options)
PHTC	2349	Photo Digital Imaging II
PHTC	2353	Portraiture II
PHTC	1351	Photojournalism
PHTC	2371	Video for Photographers

Second Semester

PHTC	2340	Photographic Studio Management
PHTC	1345	Illustrative Photography I
PHTC	2343	Portfolio Development (Capstone)
PHTC	2380	Cooperative Education – Commercial Photography

TECHNICAL COURSE ²

1. Select one Technical course (3 hours): ARTS 2348, ARTS 2356, PHTC 1343, or PHTC 1371
2. Select one Technical course (3 hours): PHTC 1347, PHTC 2308, or PHTC 2342

Certificate Level 1 – Studio Production

18 credit hours

FIRST YEAR**First Semester**

PHTC	1311	Fundamentals of Photography
ARTS	2356	Photography I/Darkroom

Second Semester

PHTC	1353	Portraiture I
PHTC	1300	Photo Digital Imaging I (Capstone)

TECHNICAL COURSE ¹

TECHNICAL COURSE ¹

1. Select one Technical course* (3 credit hours): ARTS 2348, PHTC 1343, PHTC 1351, PHTC 1341 or PHTC 2371

*Note: Students planning to apply credits toward the Level 2 Certificate and/or the AAS awards should discuss elective options with the department to ensure elective choices are applicable.

Certificate Level 2 – Commercial Photography Specialist

36 credit hours

Prior to being admitted into this program, the student must have earned the Certificate Level 1 – Studio Production or have permission of the Associate Dean.

Students must be TSI complete.

FIRST YEAR

First Semester

PHTC 2331 Architectural Photography
 PHTC 1341 Color Photography I
 PHTC 2353 Portraiture II
 TECHNICAL COURSE ¹

Second Semester

PHTC 2349 Photo Digital Imaging II
 PHTC 1351 Photojournalism
 PHTC 2371 Video for Photographers
 PHTC 1345 Illustrative Photography I

SECOND YEAR

First Semester

PHTC 2340 Photographic Studio Management
 PHTC 2343 Portfolio Development (Capstone)
 PHTC 2380 Cooperative Education – Commercial Photography
 TECHNICAL COURSE ²

1. Select one Technical course (3 hours): ARTS 2348, ARTS 2356, PHTC 1343, or PHTC 1371
2. Select one Technical course (3 hours): PHTC 1347, PHTC 2308, or PHTC 2342

PHYSICAL THERAPIST ASSISTANT

Department Website:

<http://www.collin.edu/department/physicaltherapist/>

Program Options:

AAS – Physical Therapist Assistant

The Physical Therapist Assistant program trains students to become physical therapy assistants. The Program takes two years to complete over six semesters. Instruction includes classroom, lab, and clinical settings, with students completing three six-week clinical experience training under the supervision of a physical therapist or physical therapist assistant. Contact mcox@collin.edu for more information. The program website is: <http://www.collin.edu/department/physicaltherapist/>

Pending the Program being granted Accreditation status from the Commission on Accreditation in Physical Therapy Education (CAPTE), students will be eligible to take the National Physical Therapy Exam (NPTE) for

physical therapist assistants offered by the Federation of State Boards of Physical Therapy (FSBPT). Successfully passing the NPTE exam allows the student to become a physical therapy assistant. To practice in the State of Texas, the student must apply and meet the licensure requirements for State, which are based on the NPTE test scores.

SELECTIVE ADMISSIONS REQUIREMENTS

Registration is by permission only. Please contact the Program Director, the program website, or the Health Sciences and Emergency Services Division Office for details on the admission process.

To apply, students must:

- Submit the required application by the designated deadline (see department website for deadline information) using the Physical Therapist Assistant Centralized Application Services (PTACAS).
- Apply and be admitted to Collin College
- Attend a PTA Zoom Information session (see website for details)
- Submit three letters of recommendation, two of which must be from a PT or PTA
- Submit proof of at least 20 observation hours in the field
- Complete the following prerequisites with a passing grade:
 - BIOL 2401 – Anatomy and Physiology I (taken within the last five years before application)
 - ENGL 1301 – Composition I
 - PTHA 1409 – Introduction to Physical Therapy
- Submit TEAS – Allied Health Test Scores
 - Minimum Composite score = 50%
 - Minimum Reading score = 60%
 - Minimum Human A&P score = 50%
- Upload all official transcripts to the PTACAS
- Be invited to participate in a scored group interview
- Complete a graded one-page essay on an identified topic after the interview

The top 24 students will be selected for admission to the Program based on the above requirements.

Application and admissions deadlines can be found on the program website.

ESSENTIAL FUNCTIONS

All students must meet specific functional abilities with or without accommodations for successful program completion and to function safely and effectively in the variety of the profession's settings. The specific functional

requirements are under the "Essential Functions" tab on the program website. Students who think they may not be able to meet the essential functions and need accommodation are encouraged to contact the college ACCESS department as soon as this Program is of interest.

Prior to the clinical assignment, students must complete all immunizations required by the Texas Department of State Health Services (TDSHS)*. If the student does not complete the required immunization, the student will not be able to complete the clinical portion of the PTA program, and graduation may be delayed.

**All immunizations must be completed and up-to-date before the assignment to a clinical facility. If you cannot complete or provide proof of the updated immunizations before your clinical assignment, you may not be able to complete the coursework on time for graduation.*

MINIMAL GRADE TO CONTINUE

To continue in the Program, students must complete all courses, clinical experiences, and tests with a 75 or above. All skills checks and practical examinations must be passed to continue in the Program.

HEALTH INSURANCE

All PTA students must show proof of health insurance before starting the clinical rotation.

CPR

The Program requires a current American Heart Association Basic Life Support CPR certification. The certification must be completed by the Program's start and current throughout the Program. CPR certification is at the expense of the student.

CRIMINAL BACKGROUND CHECK

All students will be required to complete a criminal background check. Students who have been involved with the criminal system, please be advised that your background could keep you from completing your clinical assignment. If you have a question about your background, please speak with your faculty member or the department chair.

PROGRAM COMPLETION REQUIREMENTS

Upon successfully completing the following criteria, Collin College will grant an Associate of Applied Science Degree with a major in Physical Therapist Assistant.

1. Technical Courses: Students must complete all technical program coursework with a minimum grade of 75%, a "C" for each course.
2. Clinical Education: Students must pass all clinical education courses and complete all 60 mandatory skills of an entry-level physical therapist assistant,

as noted in the Clinical Education Handbook from the PTAMACS.

3. Complete the Collin College general education requirements.
4. Comprehensive Exam: Students must pass a comprehensive examination at the end of the 2nd semester.
5. Program faculty must assess students at "Entry-level" for all ten Professional Behaviors.
6. Complete all program requirements and be in good standing with the Program and College.

AAS – Physical Therapist Assistant

66 credit hours

PRE-ENTRANCE REQUIREMENTS

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> ¹
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>PTHA</u>	<u>1409</u>	Introduction to Physical Therapy

FIRST YEAR

First Semester

<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u> ¹
<u>PTHA</u>	<u>1225</u>	Communication in Health Care
<u>PTHA</u>	<u>1229</u>	Applied Physical Principles

<u>PTHA</u>	<u>1405</u>	Basic Patient Care Skills
<u>PTHA</u>	<u>1413</u>	Functional Anatomy

Second Semester

<u>PTHA</u>	<u>1321</u>	Pathophysiology for the PTA
<u>PTHA</u>	<u>1431</u>	Physical Agents
<u>PTHA</u>	<u>2201</u>	Essentials of Data Collection
<u>PTHA</u>	<u>2205</u>	Neurology
<u>PTHA</u>	<u>2409</u>	Therapeutic Exercise

Third Semester

<u>PTHA</u>	<u>1266</u>	Practicum - Physical Therapist Assistant I
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SECOND YEAR

First Semester

<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> (See Social/Behavioral Sciences options)
<u>PTHA</u>	<u>2250</u>	Current Concepts in Physical Therapy
<u>PTHA</u>	<u>2431</u>	Management of Neurological Disorders
<u>PTHA</u>	<u>2435</u>	Rehabilitation Techniques
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Second Semester

<u>PTHA</u>	<u>2239</u>	Professional Issues
<u>PTHA</u>	<u>2266</u>	Practicum - Physical Therapist Assistant II
<u>PTHA</u>	<u>2267</u>	Practicum - Physical Therapist Assistant III (Capstone)

1. Must be taken within the past 5 years.

POLYSOMNOGRAPHIC TECHNOLOGY

Department Website:

www.collin.edu/sleep

Program Options:

AAS – Polysomnographic Technology

Certificate Level 1 – Polysomnographic Technology

Sleep medicine is a growing field with more than 100 sleep disorders identified, and an estimated 60 million people in the United States suffering from at least one sleep disorder, many of which are undiagnosed or untreated. Be part of the team that helps identify and treat those disorders with a certificate or Associate of Applied Science (AAS) degree from Collin College. As a polysomnographic technologist, you will conduct the sleep studies that allow physicians to diagnose and treat patients suffering from sleep disorders, evaluate patient sleep data, and educate patients on their sleep disorders and how best to manage them.

Through the Polysomnographic Technology program, Collin College students are prepared to enter the growing and challenging field of sleep medicine by being equipped with the skills and fundamental knowledge to effectively monitor, manage, and treat sleep disorders under medical supervision. The program offers two degree options. The 22-month AAS degree track is for students who do not have a healthcare background. The 12-month certificate is for individuals who are board-registered in any healthcare field and/or have a minimum of one year of current work experience in a sleep lab/center.

Upon graduation from either award, the graduate is eligible to sit for the Board of Registered Polysomnographic Technologists exam to become a Registered Polysomnographic Technologist (RPSGT) and/or the American Board of Sleep Medicine exam to become a Registered Sleep Technologist (RST).

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Mathematics and science courses that are part of the curriculum but completed at an institutionally accredited college/university, must have been completed within five years of the Fall semester of the admission year in order to receive transfer credits. The minimum passing grade for all Polysomnographic Technology lecture, lab and clinical course work is a C.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities—with or without accommodations—for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information on the Polysomnographic Technology website: <http://www.collin.edu/sleep>. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION

The Collin College Polysomnographic Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (<http://www.caahep.org>) upon the recommendation of the Committee on Accreditation for Polysomnographic Technologist Education (<http://www.coapsg.org>). They may be contacted at:

Commission on Accreditation of
Allied Health Education Programs
9355 - 113th St. N, #7709
Seminole, FL 33775
727.210.2350
<http://www.caahep.org>

ADDITIONAL ADMISSION REQUIREMENTS

Registration is by permission only. Information and applications may be obtained online at <http://www.collin.edu/sleep> or the Health Sciences Division Office. To apply, students must:

- Submit the required application form by the designated deadline
- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts
- Complete Collin College reading, writing and mathematics assessments
- Complete the health exam with a satisfactory result
- Document acceptable findings on drug screens, background checks and physical/mental competencies
- Complete program admission criteria (see Admission Packet)

- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) *

* *It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.*

Health Insurance – All Polysomnographic Technology students are required to show proof of health insurance prior to starting clinical rotations each semester.

PROGRAM COMPLETION REQUIREMENTS

In addition to completion of all polysomnographic technology course work, students are required to complete and pass a capstone Registered Polysomnographic Technologist (RPSGT) practice exam and a comprehensive capstone clinical simulation. Both the RPSGT capstone exam and clinical simulation will take place during the final semester of the program award. If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

AAS – Polysomnographic Technology

60 credit hours

PREREQUISITES

BIOL 2404 Human Anatomy and Physiology Basic
HPRS 1204 Basic Health Profession Skills

FIRST YEAR

First Semester

ENGL 1301 Composition I
PSGT 1215 Introduction to Polysomnography
PSGT 1310 Neuroanatomy and Physiology
RSPT 1240 Advanced Cardiopulmonary Anatomy and Physiology
SPCH 1311 Introduction to Speech Communication (See [Speech](#) options)

Second Semester

PSGT 1205 Neurophysiology of Sleep
PSGT 1340 Sleep Disorders
PSGT 1400 Polysomnography I
RSPT 1237 Basic Dysrhythmia Interpretation
GEN ED [Social/Behavioral Sciences](#) course

Third Semester (Summer)

PSGT 1360 AAS Clinical I – Polysomnography

SECOND YEAR

First Semester

PSGT 2205 Sleep Scoring and Staging
PSGT 2360 AAS Clinical II – Polysomnography
PSGT 2411 Polysomnography II
GEN ED [Humanities/Fine Arts](#) course

Second Semester

PSGT 2250 Infant and Pediatric Polysomnography
PSGT 2271 Pharmacology for Polysomnography
PSGT 2272 Polysomnography Exam Preparation (Capstone)
PSGT 2361 AAS Clinical III – Polysomnography
PSGT 2374 Clinical Sleep Education

Certificate Level 1 – Polysomnographic Technology

28 credit hours

PRE-ENTRANCE REQUIREMENTS

Prior to being admitted to this program, students must provide official documentation showing they have earned board registry in any health care field -AND/OR- they have a minimum of one year, current work experience in a sleep lab/center.

FIRST YEAR

First Semester (Fall)

PSGT 1260 Certificate Clinical I – Polysomnography
PSGT 1310 Neuroanatomy and Physiology
PSGT 1400 Polysomnography I
RSPT 1240 Advanced Cardiopulmonary Anatomy and Physiology
RSPT 1237 Basic Dysrhythmia Interpretation

Second Semester (Spring)

PSGT 1340 Sleep Disorders
PSGT 2205 Sleep Scoring and Staging
PSGT 2250 Infant and Pediatric Polysomnography
PSGT 2260 Certificate Clinical II – Polysomnography
PSGT 2411 Polysomnography II

Third Semester (Summer)

PSGT 2272 Polysomnography Exam Preparation (Capstone)

REAL ESTATE MANAGEMENT

Department Website:

<http://www.collin.edu/department/realestate/>

Program Options:

AAS – Real Estate Management

Certificate Level 1 – Real Estate Sales Agent

Real estate is a dynamic field in which highly-motivated men and women can and do create their own success stories. The degree program in real estate is designed with flexibility to allow students to successfully achieve a goal, whether it be personal knowledge, receipt of a degree, completion of a certificate program, transfer to a college or university, or real estate licensure.

Students will explore a variety of topics including fundamentals and principles of real estate; sources of financing; state and federal influences on financing; legal rights of owners, buyers and brokers; property appraisal; contract negotiations; and closing. An excellent instructional staff and a cooperative education program with local brokers give real estate students at Collin College a personalized, practical, high quality educational experience.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Students will explore a variety of topics including fundamentals and principles of real estate; sources of financing; state and federal influences on financing; legal rights of owners, buyers and brokers; property appraisal; contract negotiations; and closing. An excellent instructional staff and a cooperative education program with local brokers give real estate students at Collin College a personalized, practical, high quality educational experience.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Real Estate Management

60 credit hours

FIRST YEAR

First Semester

Each of these courses is offered as a 5-week express course.

Recommended sequence of courses:

RELE	1300	Contract Forms and Addenda
RELE	1301	Principles of Real Estate I
RELE	1311	Law of Contracts
RELE	1319	Real Estate Finance
RELE	1338	Principles of Real Estate II
RELE	2301	Law of Agency

Second Semester

BMGT	1305	Communications in Management
BUSG	2309	Small Business Management/ Entrepreneurship

ENGL 1301 Composition I
MATH 1332 Contemporary Mathematics
(Quantitative Reasoning)
(See [Mathematics](#) options)

ELECTIVE ¹

SECOND YEAR

First Semester

RELE	1321	Real Estate Marketing
MRKG	1301	Customer Relationship Management
<u>ENGL 1302</u>		<u>Composition II</u> ²
<u>GEN ED</u>		<u>Social/Behavioral Sciences</u> course
ELECTIVE ³		

Second Semester

<u>ECON 1301</u>		<u>Introduction to Economics</u> ⁴
MRKG	2349	Advertising and Sales Promotion (Capstone) ⁵
<u>SPCH 1321</u>		<u>Business and Professional</u> <u>Communication</u> (See Speech options)
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

1. *Real Estate Elective (3 credit hours): RELE 1303 or RELE 1325*
2. *May substitute ENGL 2311*
3. *Business Elective (3 credit hours): BCIS 1305, BUSI 1301, BUSI 1307, BUSI 2301, BMGT 1307, BMGT 1327, BMGT 1344, LMGT 1319, LMGT 1325 or LMGT 2330*
4. *May substitute ECON 2301 or ECON 2302*
5. *May substitute RELE 1380*

Certificate Level 1 – Real Estate Sales Agent

18 credit hours

This certificate provides the required pre-licensing courses for the Texas Real Estate Sales Agent exam.

Recommended sequence of courses:

RELE	1301	Principles of Real Estate I
RELE	1338	Principles of Real Estate II

RELE	2301	Law of Agency
RELE	1311	Law of Contracts
RELE	1300	Contract Forms and Addenda
RELE	1319	Real Estate Finance

REHABILITATION AIDE

Program Option:

Occupational Skills Award (OSA) – Rehabilitation Aide

The Rehabilitation Aide Occupational Skills Award (OSA) is a two-semester award that prepares the student for a career as a Rehabilitation Aide or Physical Therapy Technician. This award is an excellent start for anyone interested in pursuing a career in physical therapy, occupational therapy, chiropractic, medicine, massage, personal training, and other related medical fields. The two-semester track will offer an in-depth education with hands-on experience in the rehabilitation field using experienced clinical staff and faculty along with state-of-the-art lab and simulation equipment. The award prepares the student to work in the rehabilitation field. It provides students interested in an advanced career in rehabilitation a springboard to explore their interests and begin working toward advanced degrees and training. Contact mcox@collin.edu for more information.

SELECTIVE ADMISSIONS REQUIREMENTS

Registration is by permission only. Spaces in the Rehabilitation Aide OSA are limited. Please contact the Program Director, the program website, or the Health Sciences and Emergency Services Division Office for details on the admission process.

To apply, students must:

- Submit the required application by the designated deadline (see department website for deadline information)
- Submit a short essay addressing application criteria by the designated deadline. Details for the required content can be found on the program website or contact the Program Director or the Health Sciences and Emergency Services Division Office for more information.
- Prior to clinical placement, students must pass a drug screen and submit a background check. Both screens are at the student's expense. Results of both screens are factors in determining clinical placement.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

All students are required to meet specific functional abilities with or without accommodations for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the "Functional Abilities / Core Performance Standards"

documents provided in the program information and application forms. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

Prior to the clinical assignment, students must complete all immunizations required by the Texas Department of State Health Services (TDSHS)*. If the student does not complete the required immunization, the student will not be able to complete the clinical portion of the OSA and graduation may be delayed.

**It is important to note that one of the required vaccinations, Hepatitis B, consists of a three-dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before the assignment to a clinical facility. If you are not able to complete the immunizations before your clinical assignment, you may not be able to complete the coursework on-time for graduation.*

MINIMAL GRADE TO CONTINUE

Students must complete each course in the OSA program with a "C" or better.

HEALTH INSURANCE

All Rehabilitation Aide students are required to show proof of health insurance before starting the clinical rotation.

CPR

The program requires a current American Heart Association Basic Life Support CPR certification. The certification must be completed by the start of the clinical rotation. CPR certification is at the expense of the student.

CRIMINAL BACKGROUND CHECK

All students will be required to complete a criminal background check. Students who have been involved with the criminal system, please be advised that your background could keep you from completing your clinical assignment. If you have a question about your background, please speak with your faculty member or the department chair.

PROGRAM COMPLETION REQUIREMENTS

In addition to successfully completing the curriculum, students will complete a Rehabilitation Aide Certification Test. The test will be at the student's expense and will be completed at the end of the program in the last semester as part of the clinical course.

Occupational Skills Award (OSA) – Rehabilitation Aide

10 credit hours

FIRST YEAR

First Semester

PTHA 1201 The Profession of Physical Therapy

PTHA 1409 Introduction to Physical Therapy

Second Semester

PTHA 1160 Clinical – Physical Therapist Assistant

HPRS 2310 Basic Health Profession Skills II

RESPIRATORY CARE

Department Website:

<http://www.collin.edu/rcp>

Program Option:

AAS – Respiratory Care

Breath is life. There are few things scarier than the inability to breathe, even for a short time. Be part of the team that helps patients breathe easier with an Associate of Applied Science (AAS) degree in Respiratory Care from Collin College.

A day in the life of a respiratory therapist might include providing care to patients with lung or heart disorders, managing ventilators in the intensive care units, responding to Code Blue or other urgent calls for care, educating patients and families about lung disease, and consulting with physicians to recommend a change in therapy.

Respiratory Therapists can work in: Critical Care Units, Emergency Rooms, Neonatal and Pediatric Units, Operating Rooms, Skilled Nursing Facilities, Doctor's Offices, Asthma Education Programs or Smoking Cessation Programs.

Collin College's Respiratory Care Program prepares individuals for an allied health specialty in the clinical care and management of respiratory disorders. The 22-month program will prepare students to apply for the Therapist Multiple Choice and Clinical Simulation Credentialing Exams given by the National Board for Respiratory Care. The college also partners with Midwestern State University to offer a Bachelor of Science in Respiratory Care online completion program.

For individuals who hold a Certified Respiratory Therapist (CRT) credential who would like to become registry-eligible, please contact the Program Director.

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your

background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Science courses that are part of the curriculum but completed at an institutionally accredited college/university, must have been completed within five years of the Fall semester of the admission year in order to receive transfer credits. The minimum passing grade for all Respiratory Care lecture, lab and clinical course work is a C.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

Spaces in the Respiratory Care Program are limited. Please see the Respiratory Care Program Information Packet, at <http://www.collin.edu/rcp> for details on the selective admission process.

ACCREDITATION

The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). They may be contacted at:

Commission on Accreditation for Respiratory Care
1248 Harwood Road
Bedford, Texas 76021-4244
Phone: 817.283.2835
Fax: 817.354.8519

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information on the Respiratory Care website: <http://www.collin.edu/rcp>. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ADDITIONAL ADMISSION REQUIREMENTS

Registration is by permission only. Information and applications may be obtained online at <http://www.collin.edu/rcp> or the Health Sciences and Emergency Services Division Office. To apply, students must:

- Submit the required application form by the designated deadline
- Submit official copies of all college transcripts to the Respiratory Care Program Director.

- Complete Collin College reading, writing and mathematics assessments
- Overall GPA of 2.5 with a minimum grade of “C” in all prerequisite courses
- Complete the health exam with a satisfactory result prior to the application deadline
- Agree to criminal background check. Negative findings from the background check may compromise clinical placement.
- Once admitted, student must pass a drug screen at the student’s expense, when requested and as directed by the program
- Attend a student orientation prior to the start of the first semester in the program
- Successfully complete all program admission criteria (see Application Packet)
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS) *
- CPR – Requires current American Heart Association Basic Life Support CPR certification.

** It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. All immunizations must be completed by the deadline specified by the program.*

Health Insurance – All Respiratory Care students are required to show proof of health insurance prior to starting clinical rotations and must maintain coverage while in the program.

PROGRAM COMPLETION REQUIREMENTS

In addition to successfully completing the respiratory care curriculum, students are required to successfully complete a comprehensive Therapist Multiple Choice (TMC) Self-Assessment Examination and a Clinical Simulation Self-Assessment Examination during the second year of the program.

1. A TMC Practice exam will be given in the Fall semester of the second year.
2. A TMC Self-Assessment Examination will be given in the Spring semester of the second year.
3. Clinical Simulation Self-Assessment Examination will be given in the Spring semester of the second year.
4. Meet all Collin College graduation requirements.

Satisfactory completion of these exams is required for graduation from the program. Students who do not pass any of these exams will be required to complete prescribed remediation assignments and retest. The program reserves the right to limit the number of retests.

CRT TRANSITION PROGRAM

The program, after admission to the college, offers a transition option to allow students who hold a CRT credential, have institutionally accredited college credit in entry level respiratory care, and have one year of recent

clinical experience as a respiratory therapist to enter the second year of the Respiratory Therapy Program, receive their degree and become registry-eligible. Content and clinical skill competency tests must be satisfactorily completed for students to enter this option. Contact the Program Director for more information.

AAS – Respiratory Care

66 credit hours

PREREQUISITES

<u>BIOL</u>	<u>2401</u>	<u>Anatomy and Physiology I</u> ¹
<u>BIOL</u>	<u>2402</u>	<u>Anatomy and Physiology II</u> ¹
HPRS	1204	Basic Health Profession Skills
HPRS	1272	Microbiology for Health Professions

FIRST YEAR

First Semester

RSPT	1160	Clinical I – Respiratory Care Therapist
RSPT	1201	Introduction to Respiratory Care
RSPT	1340	Advanced Cardiopulmonary Anatomy and Physiology
RSPT	1410	Respiratory Care Procedures I

Second Semester

RSPT	1361	Clinical II – Respiratory Care Therapist
RSPT	1411	Respiratory Care Procedures II
RSPT	1213	Respiratory Care Pharmacology
RSPT	2310	Cardiopulmonary Disease
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

Third Semester

RSPT	1362	Clinical III – Respiratory Care Therapist
RSPT	2414	Mechanical Ventilation

SECOND YEAR

First Semester

<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> ²
RSPT	2255	Critical Care Monitoring
RSPT	2353	Neonatal/Pediatric Cardiopulmonary Care
RSPT	2360	Clinical IV – Respiratory Care Therapist

Second Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
RSPT	2130	Respiratory Care Examination Preparation
RSPT	2139	Advanced Cardiac Life Support
RSPT	2147	Specialties in Respiratory Care

RSPT	2231	Simulations in Respiratory Care
RSPT	2361	Clinical V – Respiratory Care Therapist (Capstone)

1. No course substitutions

2. May substitute SOCI 1301

ROBOTICS AND AUTOMATION TECHNOLOGY (FORMERLY INDUSTRIAL AUTOMATION)

Program Options:

**AAS – Robotics and Automation Technology
Certificate Level 1 – Robotics and Automation
Technology**

**Certificate Level 2 – Robotics and Automation
Technology**

Robotics and Automation Technology makes production and distribution systems more efficient and improves quality and productivity. Collin College's Robotics and Automation Technology program will provide you with the skills and training to work as a Robotics and Automation specialist in many areas such as food and beverage, pharmaceutical, automotive, electronics, medical, and many other supply chain businesses. Robotics and Automation Technology specialists learn to service and test robots and other automated equipment and to design processes to maximize the efficiency and output of these systems. Robotics and Automation specialists install, repair, and maintain the equipment used in modern facilities. The need and salaries for these highly-skilled positions continues to grow with the advancements in Robotics and Automation control applications and manufacturing processes. Students in this program will apply mechanical, electrical, hydraulic, pneumatic, and electronics principles. Students will develop ladder logic programs implementing programmable logic controller (PLC) functions and software programs for use with robotic equipment. Be a part of the future in supply chain with training as a Robotics and Automation Technology specialist today!

AAS – Robotics and Automation Technology

60 credit hours

FIRST YEAR

First Semester

CETT	1307	Fundamentals of Electronics
CETT	1425	Digital Fundamentals
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ENTC	1171	Introduction to Engineering Technology
TECM	1343	Technical Algebra and Trigonometry ¹

Second Semester

CETT	1409	DC-AC Circuits
ELMT	1305	Basic Fluid Power
RBTC	1405	Robotic Fundamentals
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

SECOND YEAR

First Semester

ELMT	1301	Programmable Logic Controllers
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INTC	1307	Instrumentation Test Equipment
INTC	1357	AC/DC Motor Control
<u>PHYS</u>	<u>1405</u>	<u>Elementary Physics I - Conceptual Physics</u> (See Natural Sciences options)
RBTC	2345	Robot Application, Set-up, and Testing

Second Semester

<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
ELMT	2339	Advanced Programmable Logic Controllers
INTC	2359	Distributed Control Systems (Capstone)
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course
ELECTIVE*		

* *Elective (4 credit hours): CETT 1445 or ELMT 2480*

1. May substitute MATH 1316 or higher-level math (recommended for transfer students)

Certificate Level 1 – Robotics and Automation Technology

34 credit hours

FIRST YEAR

First Semester

CETT	1307	Fundamentals of Electronics
CETT	1425	Digital Fundamentals
ENTC	1171	Introduction to Engineering Technology
TECM	1343	Technical Algebra and Trigonometry ¹

Second Semester

CETT	1409	DC-AC Circuits
ELMT	1305	Basic Fluid Power
RBTC	1405	Robotic Fundamentals

SECOND YEAR

First Semester

ELMT	1301	Programmable Logic Controllers (Capstone)
INTC	1307	Instrumentation Test Equipment
INTC	1357	AC/DC Motor Control
RBTC	2345	Robot Application, Set-up, and Testing

1. May substitute MATH 1316 or higher-level math (recommended for transfer students)

Certificate Level 2 – Robotics and Automation Technology

44 credit hours

Students must be TSI complete.

FIRST YEAR

First Semester

CETT	1307	Fundamentals of Electronics
CETT	1425	Digital Fundamentals

ENTC	1171	Introduction to Engineering Technology
TECM	1343	Technical Algebra and Trigonometry ¹

Second Semester

CETT	1409	DC-AC Circuits
ELMT	1305	Basic Fluid Power
RBTC	1405	Robotic Fundamentals

SECOND YEAR**First Semester**

ELMT	1301	Programmable Logic Controllers
INTC	1307	Instrumentation Test Equipment
INTC	1357	AC/DC Motor Control
RBTC	2345	Robot Application, Set-up, and Testing

Second Semester

ELMT	2339	Advanced Programmable Logic Controllers
INTC	2359	Distributed Control Systems (Capstone)
ELECTIVE*		

* *Elective (4 credit hours): CETT 1445 or ELMT 2480*

1. *May substitute MATH 1316 or higher-level math (recommended for transfer students)*

SPORT AND RECREATION MANAGEMENT**Program Options:****AAS – Sport and Recreation Management****Certificate Level 1 – Recreation Management****Certificate Level 1 – Sport Management****Certificate Level 2 – Sport and Recreation Management**

The Sport & Recreation Management degree provides entry-level employment training to individuals interested in careers in the sport and recreation industry. Employment settings include sport and recreation program planning, fitness and wellness facilities management, marketing and sales, sport retail management, event and tourism program planning, and athletic coaching positions.

Collin County is a unique market that affords more opportunity for graduates wanting to go into the field of Sport & Recreation Management. We know Frisco is home to Dallas Cowboys World Headquarters, FC Dallas soccer, Dallas Stars Hockey, Frisco Rough Riders baseball, and Texas Legends basketball and PGA Headquarters. Allen is home to the Allen Americans and Dallas Sidekicks. In addition, each surrounding city has its own Park and Recreation departments, non-profit and for profit sport and recreation organizations. Having a vast number of industry organizations is vital to student networking, skill development and career placement. Upon completion of the Sport & Recreation Management AAS degree, students have the unique opportunity to transfer to local four-year institutions to complete their

bachelor's degree or a BAAS. Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Sport and Recreation Management

60 credit hours

FIRST YEAR**First Semester**

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
FITT	1373	Legal and Ethical Issues in Sport and Recreation Management
KINE	1336	Introduction to Recreation and Sports Management
TRVM	1327	Special Events Design

Second Semester

FITT	1370	Sports Tourism
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)
MRKG	1301	Customer Relationship Management
RECL	1303	Athletic Program Planning

Third Semester

FITT	1380	Cooperative Education - Health and Physical Education, General
MRKG	1311	Principles of Marketing

SECOND YEAR**First Semester**

BMGT	1327	Principles of Management
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social / Behavioral Sciences options)
HAMG	1317	Recreational Services
RECT	1301	Introduction to Therapeutic Recreation
<u>GEN ED</u>		Humanities/Fine Arts course

Second Semester

ACNT	1303	Introduction to Accounting I
FITT	1371	Principles of Promoting and Selling Sport and Recreation
FITT	2371	Leadership in Sport and Recreation (Capstone)
HRPO	2307	Organizational Behavior
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

Certificate Level 1 – Recreation Management

21 credit hours

FIRST YEAR**First Semester**

BMGT	1327	Principles of Management
HAMG	1317	Recreational Services
RECT	1301	Introduction to Therapeutic Recreation

Second Semester

ACNT	1303	Introduction to Accounting I
FITT	1370	Sports Tourism
FITT	1371	Principles of Promoting and Selling Sport and Recreation
HRPO	2307	Organizational Behavior (Capstone)

Certificate Level 1 – Sport Management

21 credit hours

FIRST YEAR**First Semester**

FITT	1373	Legal and Ethical Issues in Sport and Recreation Management
KINE	1336	Introduction to Recreation and Sports Management
TRVM	1327	Special Events Design

Second Semester

FITT	1370	Sports Tourism (Capstone)
FITT	1371	Principles of Promoting and Selling Sport and Recreation
MRKG	1301	Customer Relationship Management
MRKG	2333	Principles of Selling

Certificate Level 2 – Sport and Recreation Management

39 credit hours

*Students must be TSI complete.***FIRST YEAR****First Semester**

FITT	1373	Legal and Ethical Issues in Sport and Recreation Management
KINE	1336	Introduction to Recreation and Sports Management
TRVM	1327	Special Events Design

Second Semester

FITT	1370	Sports Tourism
MRKG	1301	Customer Relationship Management
RECL	1303	Athletic Program Planning

SECOND YEAR**First Semester**

BMGT	1327	Principles of Management
HAMG	1317	Recreational Services
RECT	1301	Introduction to Therapeutic Recreation

Second Semester

ACNT	1303	Introduction to Accounting I
FITT	1371	Principles of Promoting and Selling Sport and Recreation
FITT	2371	Leadership in Sport and Recreation (Capstone)
HRPO	2307	Organizational Behavior

SUPPLY CHAIN MANAGEMENT**Program Options:****AAS – Supply Chain Management****Certificate Level 1 – Logistics****Certificate Level 1 – Purchasing**

Learn to manage supply chain activities, including logistics, purchasing, inventory and warehouse management with an Associate of Applied Science or certificates from Collin College.

Collin College's Supply Chain Management program will prepare for employment in a variety of roles in this rapidly growing field which currently employs more than 6 million people and is anticipated to grow by 1.4 million jobs over the coming years. The Dallas/Fort Worth region is a national leader in supply chain services with 500 motor carriers, 50 air cargo carriers, three freight rail lines, three major airports and 250 area firms.

The Program offers an AAS, and two Academic Certificates, one in Logistics and one in and one in Purchasing.

The program is integrated with SCPPro™, a series of eight professional designations from the Council for Supply Chain Management.

AAS – Supply Chain Management

60 credit hours

FIRST YEAR**First Semester**

BMGT	1313	Principles of Purchasing
BMGT	1344	Negotiations and Conflict Management
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITSC	1309	Integrated Software Applications I – MS Office
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

Second Semester

ACNT	1303	Introduction to Accounting I ¹
BMGT	1307	Team Building
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> ²
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course
IBUS	1341	Global Supply Chain Management

SECOND YEAR**First Semester**

BMGT	1309	Information and Project Management
BMGT	2309	Leadership
BUSI	2301	Business Law
LMGT	1319	Introduction to Business Logistics
<u>MATH</u>	<u>1324</u>	<u>Mathematics for Business and Social Sciences</u> ³

Second Semester

BMGT	1341	Business Ethics
BMGT	2303	Problem Solving and Decision Making
IBUS	2332	Global Business Simulation (Capstone) ⁴
LMGT	1325	Warehouse and Distribution Center Management
LMGT	2330	International Logistics Management

1. May substitute ACCT 2301
2. May substitute ECON 2301 or ECON 2302
3. May substitute MATH 1332 or 1314
4. May substitute LMGT 2388

Certificate Level 1 – Logistics

18 credit hours

FIRST YEAR**First Semester**

BMGT	1309	Information and Project Management
BMGT	2309	Leadership
LMGT	1319	Introduction to Business Logistics

Second Semester

BMGT	2303	Problem Solving and Decision Making
LMGT	1325	Warehouse and Distribution Center Management
LMGT	2330	International Logistics Management (Capstone)

Certificate Level 1 – Purchasing

18 credit hours

FIRST YEAR**First Semester**

BMGT	1313	Principles of Purchasing
BMGT	1344	Negotiations and Conflict Management
ITSC	1309	Integrated Software Applications I – MS Office

Second Semester

ACNT	1303	Introduction to Accounting I
BMGT	1307	Team Building
IBUS	1341	Global Supply Chain Management (Capstone)

SURGICAL PROFESSIONS**Department Website:**<https://www.collin.edu/departments/surgicalprofessions/>**Program Options:****AAS – Surgical Technology****Certificate Level 1 – Central Sterile Processing****Advanced Technical Certificate – Surgical Assisting**

Work as a member of the healthcare team alongside physicians, surgeons, registered nurses and other healthcare workers delivering patient care before, during, and after surgery.

Surgical Technologist (CST)

You are paged to the operating room. An emergency case is in route. You switch to high gear and prepare the OR. You have the autoclaved scalpels, scissors, clamps and the additional tools for this surgery on the table. Gowned and gloved, you are prepared as the patient is pushed through the door. Pulling the sterile drapes around the patient, your senses heighten. Your skills and performance may make the difference between this person's life or death. Continually anticipating unexpected scenarios, you hand the surgeon the correct instruments and retract the incision site to give the surgeon a better view. Your job will not end until all instruments and sponges are accounted for. You apply the correct bandages to the patient and assure that the OR is in order and ready for your next patient.

The AAS in Surgical Technology at Collin College is a 12-month program (Summer, Fall, Spring) that will prepare the student for entry-level as a surgical technologist. The course of study consists of approved courses from the Workforce Education Course Manual of Texas. Upon completion of the program, the student is qualified to take the national certification examination for surgical technologists. The Commission on Accreditation of Allied Health Education Programs accredits our program allowing graduates to become eligible for the Certified Surgical Technologist, CST credential.

Central Sterile Processing

The certificate in Central Sterile Processing is a two-semester, special admission program. Graduates of this program are eligible to sit for the national certification examination administered by the International Association of Healthcare Central Service Material Management (IAHCSMM).

Surgical Assisting (CSFA)

Surgical Technologists who hold their Certified Surgical Technologist (CST) credential, an Associate of Applied Science (AAS) degree in Healthcare, and have two years of recent clinical experience as a Surgical Technologist, may apply for the Advanced Technical Certificate (ATC) Surgical Assisting program. Graduates of this program are

entitled to an Advanced Technical Certificate Surgical Assisting and upon program accreditation are eligible to sit for the national Certified Surgical First Assist (CSFA) certification examination administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). Those students passing the certification exam are allowed to use the title Certified Surgical First Assist (CSFA).

Licensure Notice: Students who have been involved with the criminal system, please be advised that your background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

Students planning to transfer to a college or university should check with Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

Admission to the programs is selective and competitive. Please see each program's specific qualifications on their department websites.

SPECIAL ADMISSION REQUIREMENTS FOR CENTRAL STERILE PROCESSING AND SURGICAL TECHNOLOGY PROGRAMS:

- Submit an application for admission to Collin College Admissions department
- Provide proof of high school graduation or GED
- Submit program application to the Health Sciences Division Office
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS)*
- Current Basic Life Support Certification provided by the American Heart Association.
- Show proof of health insurance.
- Complete the health exam with a satisfactory result exam prior to application deadline.
- Consent to criminal background check (note that negative results may compromise clinical placement)
- Consent to drug screening (note that negative results may compromise clinical placement)

** It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. All immunizations must be complete before the first clinical day.*

ADDITIONAL REQUIREMENTS FOR CENTRAL STERILE PROCESSING PROGRAM

- Submit a handwritten one- to two-page essay that discusses why you have chosen Central Sterile Processing as a profession and why attendance at Collin College is desired
- Request two letters of reference from employers and/or teachers (not friends or family) that can attest to your character and aptitude in a healthcare career. These letters should be directly mailed by whomever writes them to: Collin College – Health Sciences Division, Attn: Director of Central Sterile Processing Program, 2200 West University Drive, McKinney, Texas 75071

ADDITIONAL REQUIREMENTS FOR SURGICAL TECHNOLOGY PROGRAM

- Overall GPA of 2.5 or higher from all college courses completed and applicable to the surgical technology degree plan
- Submit official copies of all college transcripts to both Collin College and to the Surgical Technology Department
- Completion of prerequisites. If courses are being completed during the Spring preceding admission, please denote on application
- Students must be prepared to enter college-level mathematics by either completion of MATH 0405 or by placement at the MATH 1314 College Algebra level
- Submit a handwritten one- to two-page essay that discusses why you have chosen Surgical Technology as a profession
- Request two letters of reference from employers and/or teachers (not friends or family) that can attest to your character and aptitude in a healthcare career. These letters should be directly mailed by whomever writes them to: Collin College – Health Sciences Division, Attn: Director of Surgical Technology Program, 2200 West University Drive, McKinney, Texas 75071

SELECTIVE ADMISSION REQUIREMENTS FOR THE SURGICAL ASSISTING PROGRAM

- Submit an application for admission to Collin College Admissions department
- Submit program application to the Surgical Assisting Program Coordinator's Office - Collin College – Health Sciences Division, Attn: Coordinator of Surgical Assisting Program, 2200 West University Drive, H225A, McKinney, Texas 75071
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS)*
- Current Basic Life Support Certification provided by the American Heart Association.

- Show proof of health insurance.
- Consent to criminal background check (note that negative results may compromise clinical placement)
- Consent to drug screening (note that negative results may compromise clinical placement)

* It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. All immunizations must be complete before the first clinical day.

ADDITIONAL REQUIREMENTS FOR SURGICAL ASSISTING PROGRAM

- Current Certified Surgical Technologist (CST)
- Associate degree or higher (see *Note below)
- Two years recent experience as a clinical Surgical Technologist
- Submit official copies of all college transcripts denoting degrees earned to both Collin College and to the Surgical Assisting Department
- Overall GPA of 2.5 or higher from all college degrees completed
- Submit a handwritten, well-developed, one- to two-page essay discussing why you have chosen Surgical Assisting as a career choice and why attendance at the Collin College program is desired. Submit this essay with your application form by mail or in person to: Collin College – Health Sciences Division, Attn: Coordinator of Surgical Assisting Program, 2200 West University Drive, H225A, McKinney, Texas 75071.
- Respond via email to the three question survey that will be emailed to you upon receipt of your program application to the program.
- Request two letters of reference from employers and/or professors (not friends or family) that can attest to your character and aptitude in a healthcare career. These letters should be directly mailed by whomever writes them to: Collin College – Health Sciences Division, Attn: Coordinator of Surgical Assisting Program, 2200 West University Drive, H225A, McKinney, Texas 75071 or emailed to the Program Coordinator at drsmith@collin.edu.

*Note: A Bridge Opportunity is available for Surgical Assisting Program candidates who are Certified Surgical Technologists (CST), have a minimum of two years' recent experience, but do not possess an associate degree or higher. Contact the Surgical Assisting Program Coordinator at drsmith@collin.edu for more information.

Health Insurance – All Central Sterile, Surgical Technology, and Surgical Assisting students are required to show proof of health insurance prior to starting clinical rotations each semester. Additionally, Surgical Assisting students are required to show proof of malpractice insurance prior to starting clinical rotations each semester.

NOTE: Students interested in admission to the program for Summer semester should see their physician and begin immunizations four (4) months prior to the beginning of the semester.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities, with or without accommodations, for successful completion of the program, and to function safely and effectively in the variety of professional settings. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information packet and on the Surgical Technology website. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION

The Collin College AAS – Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Accreditation Review Committee on Surgical Technology and Surgical Assisting (ARCSTA).

They may be contacted at:

9355 - 113th St. N, #7709

Seminole, FL 33775

727.210.2350

<http://www.caahep.org>

The Central Sterile Processing (CSP) curriculum is approved by the International Association of Healthcare Central Service Materiel Management (IAHCSMM). Recipients of this certificate are eligible to sit for the national certification exam.

Students interested in the program should see the academic advisor for consultation and consult the college website for more specific information. An admission packet is available upon request from the Dean of Health Sciences Office and on the Surgical Technology website.

AAS – Surgical Technology

60 credit hours

FIRST YEAR**First Prerequisite Semester**

<u>BIOL</u>	<u>2401</u>	Anatomy and Physiology I ¹
<u>ENGL</u>	<u>1301</u>	Composition I
HPRS	1204	Basic Health Profession Skills
<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)

Second Prerequisite Semester

BIOL	2402	Anatomy and Physiology II
HITT	1305	Medical Terminology I
<u>PSYC</u>	<u>2301</u>	<u>General Psychology</u> ²
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

SECOND YEAR**First (Summer) Semester**

SRGT	1271	Basic Skills of Surgical Technology
SRGT	1409	Fundamentals of Peri-operative Concepts and Techniques

Second Semester

HITT	1303	Medical Terminology II
HPRS	2300	Pharmacology for Health Professions
SRGT	1441	Surgical Procedures I
SRGT	1461	Clinical – Surgical Technology I

Third Semester

BIOL	2420	Microbiology for Non-Science Majors
SRGT	1171	Transition to Practice for the Surgical Technologist
SRGT	1442	Surgical Procedures II
SRGT	2130	Professional Readiness
SRGT	2561	Clinical – Surgical Technology II (Capstone)

1. No course substitutions

2. May substitute SOCI 1301

Certificate Level 1 – Central Sterile Processing

16 credit hours

FIRST YEAR**First Semester**

HPRS	1470	Central Sterile Processing I
HPRS	1370	Central Sterile Processing II
HPRS	1471	Central Sterile Processing III

Second Semester

HPRS	1561	Clinical – Health Services/Allied Health/Health Sciences, General (Capstone)
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Advanced Technical Certificate – Surgical Assisting

34 credit hours

This Advanced Technical Certificate is designed for Surgical Technologists that already have an Associate Degree plus 2 years' experience as a Certified Surgical Technologist.

First Semester

CSFA	1371	Fundamentals and Surgical Safety
CSFA	2371	Surgical Procedures
CSFA	2472	Suturing, Knot Tying, Hemostasis and Wound Healing
HITT	2435	Coding and Reimbursement Methodologies ¹

Second Semester

CSFA	1172	Pharmacology and Anesthesia
CSFA	1173	Principles of Surgical Assisting Lab I
CSFA	1175	Perioperative Microbiology and Bioscience
CSFA	2372	Operative Anatomy and Pathophysiology I
CSFA	2473	Surgical Assisting Clinical I

Third Semester

CSFA	1176	Complications in Surgery
CSFA	2171	Role Definition, Ethical, Legal and Moral Responsibilities
CFSA	2173	Principles of Surgical Assisting Lab II
CFSA	2373	Operative Anatomy and Pathophysiology II
CFSA	2474	Surgical Assisting Clinical II (Capstone)

1. Course may be taken at any time before or during the program

URBAN SUSTAINABLE AGRICULTURE**Department Website:**<http://www.collin.edu/department/agriculture/>**Program Options:****AAS – Urban Sustainable Agriculture****Certificate Level 1 – Controlled Environment Agriculture****Certificate Level 1 – Sustainable Agriculture**

Collin County has a rich agricultural history, that continues to be strong today. According to the USDA census data, 50% of acreage in Collin County is identified as agricultural, and although the sizes of local farms are decreasing, the number of small farms is increasing. Small footprint farms are producing more crops per square foot with less water and a smaller environmental impact! Agriculture is the art and science of raising plants and animals for human benefit. It is the foundation of

civilizations and contributes to food security. The urban sustainable agriculture program offers students an opportunity to learn sustainable practices, incorporate precision technology, and develop food solutions for an ever-increasing population. Students will develop the skills to create their own small farm, develop the technical knowledge and marketable skills needed to manage controlled environment growing operations, and market locally sourced produce to chefs and families. Students will learn how to manage a small farm growing operation and create a local farm-to-table program.

Collin's Urban Sustainable Agriculture is a multidisciplinary program that will prepare you to work in the agriculture industry including sales, management, entrepreneurship, conservation practices, and marketing of agricultural products directly to consumers and restaurants.

AAS – Urban Sustainable Agriculture

60 credit hours

FIRST YEAR

First Semester

AGCR	2305	Entomology
AGCR	2371	Introduction to Sustainable Agriculture
CHEF	1305	Sanitation and Safety ¹
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
HALT	2421	Small Farming

Second Semester

AGCR	2313	Soil and Water Conservation Management
AGRI	1415	Horticulture
AGRI	2303	Agricultural Construction
HALT	2308	Greenhouse Management
HALT	2402	Greenhouse Crop Production

SECOND YEAR

First Semester

AGRI	1325	Marketing of Agricultural Products
BCIS	1305	Business Computer Applications
BUSI	1301	Business Principles
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1324</u>	<u>Mathematics for Business and Social Sciences</u> (See Mathematics options)

Second Semester

AGCR	2586	Internship – Crop Production (Capstone)
<u>CHEM</u>	<u>1405</u>	<u>Introduction to Chemistry I</u> ²
<u>GEN ED</u>		<u>Humanities/Fine Arts</u> course

1. *ServSafe and Food Protection Management Certification*
2. *May substitute CHEM 1411. Please check with your transfer institution for degree applicability. CHEM 1411 has MATH 1314 College Algebra as a prerequisite.*

Certificate Level 1 – Controlled Environment Agriculture

17 credit hours

FIRST YEAR

First Semester

AGCR	2313	Soil and Water Conservation Management
AGRI	1415	Horticulture
AGRI	2303	Agricultural Construction
HALT	2308	Greenhouse Management
HALT	2402	Greenhouse Crop Production (Capstone)

*NOTE: Per current course descriptions, prerequisites are not required for any courses in the *Certificate Level 1 - Controlled Environment Agriculture* award.

Certificate Level 1 – Sustainable Agriculture

16 credit hours

FIRST YEAR

First Semester

AGCR	2305	Entomology
AGCR	2371	Introduction to Sustainable Agriculture
CHEF	1305	Sanitation and Safety ¹
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
HALT	2421	Small Farming (Capstone)

1. ServSafe and Food Protection Management Certification

*NOTE: Per current course descriptions, prerequisites are not required for any courses in the *Certificate Level 1 - Sustainable Agriculture* award.

VETERINARY TECHNOLOGY

Program Options:

AAS – Veterinary Technology

The Veterinary Technology program is designed to give students the knowledge and skills needed to work in veterinary clinics, animal hospitals, and animal shelters, performing basic nursing care for the animals, providing dental cleanings, assisting in surgery, producing x-rays, and assisting the Doctor of Veterinary Medicine (DVM). The knowledge and skills competencies included in the curriculum allow the students to demonstrate basic restraint and treatment techniques for domestic animals, identify breeds of animals, and learn the responsibilities of a licensed veterinary technician in a veterinary practice including physical exams, basic care, feeding, sanitation, and public and/or client relations.

In addition, students will gain skills that are specific to the pharmacological and surgical areas. The competencies in the pharmacological area will allow the students to be able

to successfully execute procedures such as the ability to identify, prepare, label, package, and dispense pharmaceuticals in an ethical/legal manner, calculate dosages using proper weights, units, and measures, and use appropriate routes and methods of drug administration; and differentiate between normal and abnormal animal patient responses to medication. In the surgical area, the competencies in the curriculum will help students be able to identify instruments used in veterinary surgery, demonstrate operating room etiquette and the use of sterile technique, perform pre-anesthesia evaluation, administer and monitor anesthesia, and provide post-anesthesia care, recognize and respond appropriately to animal patient emergencies, and assist with routine surgical and obstetrical procedures. Communication competencies have also been integrated into the curriculum so that the students can proficiently define and use veterinary terms and employ effective client and veterinary team communication. The combination of these competencies allows the student to graduate with the mastery needed to be successful in the veterinary technology field.

SELECTIVE ADMISSION REQUIREMENTS

Admission to the Veterinary Technology Program is selective. Admission to Collin College does not guarantee admission to the Veterinary Technology Program. Registration and enrollment are by permission only. Information and applications may be obtained from the Veterinary Technology department or the Veterinary Technology website:

<http://www.collin.edu/department/vettech/>.

- Applicant must have a high school diploma or its equivalent (i.e., GED).
- Applicants must be enrolled in Collin College. Admission to Collin College does not guarantee admissions to the Veterinary Technology Program.
- Applicants must meet, review, and sign the Technical Standards required by the program. All applicants must submit a signed “Technical Standards” form with their application.
- Complete prerequisite courses with a “C” or better. For a list of the prerequisite courses please visit the Veterinary Technology website.
- Applicants are required to complete at least 40 hours of clinical experience. Clinical Experience MUST be under the supervision of a Licensed Veterinary Technician (LVT) or Doctor of Veterinary Medicine (DVM). Clinical experience may be paid or volunteer (working, shadowing, or observation in a veterinary clinic or hospital). Once hours are completed, a Veterinary Technology Work Experience form will need to be filled out and signed by the supervising LVT or DVM. A form will be needed for each location used to complete the 40 hours. Completed forms must be submitted with the application form.

- Informed applicants make better candidates! Become informed about the Veterinary Technology program by attending one of the information sessions listed on the veterinary technology website. Following the information, session applicants must complete an information session verification post quiz. Applicants will be directed to a link for this quiz at the conclusion of each information session. A copy of the quiz will need to be printed and submitted with the student’s application form.
- Complete the Veterinary Technology Program Application Form.
- A mandatory criminal background check and drug screening will be required prior to enrollment of all selected applicants.
- Applicants will also have to produce proof of Tdap vaccination. Additional rabies vaccination documentation will also be required if the individual is accepted into the program.

ACADEMIC STANDARDS OF THE PROGRAM

To remain enrolled in the Veterinary Technology Program, students must maintain a C or higher in each course listed as part of the degree plan. Any final course grade lower than a “C” will not be accepted. The final grade for lecture and laboratory classes will be determined by the method reflected on the instructor’s syllabus. The final grade for cooperative education courses will be determined by the method shown in the clinical syllabus. See individual course syllabi for a detailed grading scale.

FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession’s settings. The specific functional requirements are found in the technical standards documents provided in the program information on the Veterinary Technology website <http://www.collin.edu/department/vettech/>. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

Health Insurance – *All veterinary technology students are required to show proof of health insurance prior to starting course work each semester.*

AAS – Veterinary Technology

60 credit hours

PRE-PROGRAM REQUIREMENTS

<u>BIOL</u>	<u>1406</u>	<u>Biology for Science Majors I</u>
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>MATH</u>	<u>1314</u>	<u>College Algebra</u> ¹

FIRST YEAR**First Semester**

VTHT	1105	Veterinary Medical Terminology
VTHT	1301	Introduction to Veterinary Technology
VTHT	1313	Veterinary Anatomy and Physiology
VTHT	2321	Veterinary Parasitology

Second Semester

VTHT	1217	Veterinary Office Management
VTHT	2201	Canine and Feline Clinical Management
VTHT	2323	Veterinary Clinical Pathology I
<u>GEN ED</u>		<u>Social/Behavioral Sciences</u> course

SECOND YEAR**First Semester**

VTHT	1280	Cooperative Education - Veterinary/Animal Health Technology/Technician and Veterinary Assistant
VTHT	1349	Veterinary Pharmacology
VTHT	2331	Veterinary Clinical Pathology II

Second Semester

VTHT	1245	Veterinary Radiology
VTHT	1341	Anesthesia and Surgical Assistance
VTHT	2209	Food Animal Clinical Management
VTHT	2213	Lab Animal Clinical Management
<u>GEN ED</u>		<u>Speech</u> course

Third Semester

VTHT	1271	Veterinary Technician National Examination (VTNE) Prep Course (Capstone)
VTHT	2205	Equine Clinical Management
VTHT	2280	Cooperative Education - Veterinary/Animal Health Technology/Technician and Veterinary Assistant
VTHT	2439	Veterinary Nursing Care

1. May substitute MATH 1316, MATH 1324, MATH 1325, MATH 2320, MATH 2412, MATH 2413, MATH 2414, or MATH 2415.

VIDEO PRODUCTION

Also see [Animation](#) workforce program.

Program Options:**AAS – Video Production****Certificate Level 1 – Video Production**

Are you good at telling stories? Do you love movies, TV shows, or streamed entertainment? Then join the Video Production program to learn how to make your cinematic vision a reality with a certificate or degree.

The Video Production program focuses on preproduction, production and postproduction skills necessary for creating digital video content in any delivery format. You will learn script writing, storyboarding, video production with cameras, audio and lighting, as well as nonlinear editing using industry-standard tools and techniques.

Collin College's Video Production program prepares individuals for a career in the TV, film, and other media opportunities. The 60-hour AAS degree or the 42-hour certificate will prepare you to apply for jobs as an editor, cinematographer, influencer, screenwriter and more.

AAS – Video Production

60 credit hours

FIRST YEAR**First Semester**

ARTV	1351	Digital Video
<u>DRAM</u>	<u>2366</u>	<u>Film Appreciation</u> (See Humanities/Fine Arts options)
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
FLMC	2330	Audio Post Production
RTVB	1329	Scriptwriting

Second Semester

FLMC	1331	Video Graphics and Visual Effects I
FLMC	2334	Directing for Film or Video
FLMC	2336	Production Development – Producing
RTVB	1321	TV/Video Field Production
RTVB	1325	TV Studio Production

Third Semester

<u>SPCH</u>	<u>1311</u>	<u>Introduction to Speech Communication</u> (See Speech options)
<u>GEN ED</u>		<u>Mathematics/Natural Sciences</u> course

SECOND YEAR**First Semester**

ARTV	2320	Team Program Production I
FLMC	2333	Cinematography
RTVB	2330	Film and Video Editing
<u>GEN ED</u>		<u>Social/Behavioral Sciences</u> course

Second Semester

FLMC	2331	Video Graphics and Visual Effects II
RTVB	2340	Portfolio Development (Capstone)
RTVB	2347	Digital Media Business Management
FLMC	2380	Cooperative Education Cinematography and Film/Video Production

or

RTVB	2337	TV/Video Production Workshop I
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Certificate Level 1 – Video Production

42 credit hours

FIRST YEAR**First Semester**

ARTV	1351	Digital Video
FLMC	2330	Audio Post Production
RTVB	1329	Scriptwriting

Second Semester

FLMC	1331	Video Graphics and Visual Effects I
FLMC	2334	Directing for Film or Video
FLMC	2336	Production Development – Producing
RTVB	1321	TV/Video Field Production
RTVB	1325	TV Studio Production

SECOND YEAR**First Semester**

ARTV	2320	Team Program Production I
FLMC	2333	Cinematography
RTVB	2330	Film and Video Editing

Second Semester

FLMC	2331	Video Graphics and Visual Effects II
RTVB	2340	Portfolio Development (Capstone)
RTVB	2347	Digital Media Business Management
		or
FLMC	2380	Cooperative Education - Cinematography and Film/Video Production

Vocational Nursing**Department Website:**www.collin.edu/department/lvn/**Program Option:****Certificate Level 2 – Vocational Nursing**

This is a twelve (12) month program to receive certification in Vocational Nursing at Collin College and then to become eligible to take the NCLEX-PN exam for licensure as a Licensed Vocational Nurse (LVN) by the Texas Board of Nursing. LVNs/LPNs work under the supervision of an RN, physician (MD or DO), nurse practitioner (NP or APRN), dentist or physician's assistant (PA). They can perform basic nursing duties independently and assist RNs and physicians in more complex nursing situations. LVNs/LPNs work in a variety of healthcare

settings including many areas of acute care hospitals, skilled nursing facilities/nursing homes, assisted-living facilities, long-term acute care hospitals, rehabilitation hospitals, psychiatric hospitals, substance abuse centers, dialysis centers, schools, clinics, adult and child daycare centers, correctional facilities, doctor offices, surgery centers, hospice and home healthcare among others.

ADMISSIONS REQUIREMENTS:

Minimum educational credentials required by the Texas Board of Nursing (TBON) to be admitted to an LVN Program are a high school diploma or GED/HiSET certificate.

Attendance at a Vocational Nursing Information Session is required. See www.collin.edu/department/lvn/ for dates, times and locations. This session takes approximately 75 minutes to explain details of the program.

Admission to the VN Program is a selective process. Students will be selected for the program based on a point system. The Collin College LVN Program will use the TEAS (Test of Essential Academic Skills) entrance exam by Advanced Technology Institute (ATI). Score on the TEAS entrance exam will be highly prioritized for admission. To graduate, a final grade of C or better must be earned in every nursing course required for the program.

To comply with the Center for Disease Control (CDC) recommendations and the Dallas-Fort Worth (DFW) Hospital Council requirements, blood titers are required to show immunity to measles, mumps, rubella, varicella, and hepatitis B. Vaccinations against influenza and COVID-19 (when available) are required. Tuberculosis testing and annual physical exams are required.

Current CPR certification and personal medical insurance are required during the entirety of the program.

Drug screening will be done randomly on admission and throughout the program with non-positive results required.

Licensure Notice: All students must undergo an FBI criminal background by the Texas Board of Nursing (TBON) and be approved by TBON to attend a nursing program. Students who have been involved with the criminal system, are advised that your background could keep you from being licensed by the State of Texas.

Upon initial acceptance to the program, the TBON will require an FBI criminal background check. If you can answer, **“YES”** to any one of the questions below, the TBON may require you to submit police reports, lawyer and court reports, probation records and/or other documents at their discretion to approve your eligibility to be enrolled in a nursing program and take the licensure exam upon graduation.

- Have you ever been convicted of a misdemeanor (other than a class C misdemeanor traffic violation)?
- Have you ever been convicted of a felony?
- Have you ever pled nolo contendere, no contest, or guilty?
- Have you ever received deferred adjudication?
- Have you ever been placed on community supervision or court-ordered probation, whether or not adjudicated guilty?
- Have you ever been sentenced to serve jail or prison time or court-ordered confinement?
- Have you ever been granted pre-trial diversion?
- Have you ever been arrested or have any pending criminal charges?
- Have you ever been cited or charged with any violation of the law?
- Have you ever been subject of a court-martial; Article 15 violation; or received any form of military judgment, punishment, or action?

Applicants may NOT apply for a Declaratory Order of Eligibility (DOE) from the Texas Board of Nursing before initial acceptance to a nursing program. Applicant names must be submitted by a College of Nursing.

Collin County healthcare facilities support the Collin College Nursing Programs. Several healthcare facilities throughout the Metroplex are used for the clinical experience.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information on the Nursing website <http://www.collin.edu/nursing>. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION/APPROVALS

The Collin College Vocational Nursing Program has been approved by the Texas Board of Nursing (TBON), and the Texas Higher Education Coordinating Board (THECB).

SCHOLARSHIPS

Various scholarships are available to students when they have been accepted into the Nursing Program. Most scholarships are awarded based on financial need. Other types of monetary support are available through the college's Financial Aid Office.

Certificate Level 2 – Vocational Nursing

46 credit hours

FIRST YEAR

First Semester

BIOL	2404	Human Anatomy and Physiology Basic
VNSG	1261	Clinical I - Licensed Practical/Vocational Nurse Training
VNSG	1270	Concept-Based Nursing Principles I
VNSG	1570	Concept-Based Skills I
VNSG	1577	Concept-Based Nursing Care I

Second Semester

VNSG	1262	Clinical II - Licensed Practical/Vocational Nurse Training
VNSG	1271	Concept-Based Nursing Principles II
VNSG	1571	Concept-Based Skills II
VNSG	1578	Concept-Based Nursing Care II

Third Semester

VNSG	1230	Maternal-Neonatal Nursing
VNSG	1238	Mental Illness
VNSG	1205	NCLEX-PN Review
VNSG	1579	Concept-Based Nursing Care III
VNSG	2363	Clinical III - Licensed Practical/Vocational Nurse Training

WEB DEVELOPMENT

Department Website:

<http://www.collin.edu/department/webandmobileapp/>

Program Options:

AAS – Web Development

Occupational Skills Award (OSA) – JavaScript Development

Occupational Skills Award (OSA) – Web Foundation

Certificate Level 1 – Front-end Web Developer

Certificate Level 2 – Full-stack Web Developer

Software developers with the skills to create web applications are in high demand.

This degree program teaches students to write code using a variety of tools and programming languages, such as Java, HTML, CSS, JavaScript, SQL, Node.JS, React, jQuery, WordPress, and more. The program focuses heavily on programming fundamentals, so that graduates are well prepared for a career in a rapidly changing industry. Our Associate of Applied Science in Web Development will train you to develop both the front-end and back-end of websites. Front-end development focuses on creating the

part of web sites and applications that the user sees and interacts with in the web browser. Back-end development deals with the parts that the user doesn't see, such as the updates, connections, and database storage on the server where the site is hosted. Together, front-end and back-end skills combine to allow you to create "full-stack" web applications.

The program also offers two certificates, which students can complete while working towards the associate degree. We offer certificates for "Front-End Developer" and "Full-Stack Developer". The courses required for the certificates can all be applied to the associate degree. Therefore, most students will opt to complete them along the way.

Students planning to transfer to a college or university should check with a Collin College Program Advisor prior to beginning the program, as this program combines both transfer and workforce courses.

AAS – Web Development

60 credit hours

FIRST YEAR

First Semester

COSC	1436	Programming Fundamentals I
ITSE	1311	Beginning Web Programming
ITSE	1346	Database Theory and Design
<u>PHIL</u>	<u>2303</u>	<u>Introduction to Formal Logic</u>

Second Semester

COSC	1437	Programming Fundamentals II
IMED	1341	Interface Design
ITSE	2302	Intermediate Web Programming
ITSE	2313	Web Authoring

Third Semester

<u>GEN ED</u>		<u>Mathematics</u> course
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>

SECOND YEAR

First Semester

ITSE	2371	Front-End Web Frameworks
ITSE	2309	Database Programming – SQL
COSC	2436	Programming Fundamentals III
INEW	2334	Advanced Web programming
<u>GEN ED</u>		<u>Speech</u> course

Second Semester

ITSE	2374	Web Application Development (Capstone) ¹
<u>GEN ED</u>		<u>Social/Behavioral Sciences</u> course
ELECTIVE *		
ELECTIVE *		

* Electives (6 credit hours) choose two courses from the following:
Front-end Development: ITSE 1301, ITSE 1333

Back-end Development: ITSC 1316**, ITSE 1306, ITSE 1359, ITSE 2347

General Web Development: ITNW 1358, ITSE 1330

**ITSC 1316 requires prerequisite course ITNW 1358

1. May substitute ITSE 2380

Occupational Skills Award (OSA) – JavaScript Development

9 credit hours

ITSE	1311	Beginning Web Programming
ITSE	2302	Intermediate Web Programming
INEW	2334	Advanced Web Programming

Occupational Skills Award (OSA) – Web Foundation

12 credit hours

IMED	1341	Interface Design
ITSE	1301	Web Design Tools
ITSE	1311	Beginning Web Programming
ITSE	2302	Intermediate Web Programming

Certificate Level 1 – Front-end Web Developer

18 credit hours

First Semester (Summer)

ITSE	1311	Beginning Web Programming
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Second Semester

IMED	1341	Interface Design
ITSE	1301	Web Design Tools
ITSE	2302	Intermediate Web Programming

Third Semester

ITSE	2313	Web Authoring ¹
ITSE	2374	Web Application Development (Capstone) ²

1. May substitute INEW 2334

2. May substitute ITSE 2380

Certificate Level 2 – Full-stack Web Developer

32 credit hours

First Semester (Summer)

COSC	1436	Programming Fundamentals I
ITSE	1311	Beginning Web Programming

Second Semester

COSC	1437	Programming Fundamentals II
IMED	1341	Interface Design
ITSE	2302	Intermediate Web Programming
ITSE	2309	Database Programming – SQL

Third Semester

INEW 2334 Advanced Web Programming
 ITSE 2371 Front-End Web Frameworks
 ELECTIVE *

Fourth Semester (Summer)

ITSE 2374 Web Application Development
 (Capstone) ¹

**Elective (3 credit hours) choose one course from the following:
 Front-end Development: ITSE 1301, ITSE 1333, ITSE 2313
 Back-end Development: ITSE 1359, ITSE 1306, ITSE 2347,
 COSC 2436
 General Web Development: ITSE 1330, ITNW 1358*

1. May substitute ITSE 2380

WELDING

Also see [Metal Arts workforce program](#).

Program Options:**AAS – Welding****Certificate Level 1 - Entry Welding Certification****Certificate Level 1 - Gas Shielded Welding
 Certification****Certificate Level 2 - Welding Technology Certification**

Welding is a craft that is highly valued in both the industrial world and artistic worlds. Welders who graduate from Collin College's program will be prepared to earn a job or go into business for themselves, providing a service that is always in high demand.

Collin College offers an associate of applied science in Welding, two level 1 certificates, and one level 2 certificate. The AAS will allow you to earn a degree in Welding, while the certificates are designed to qualify you in specific processes such as Entry Welding, Gas Shielded Welding, and Welding Technology.

If your program requires a criminal background check, your placement in a required clinical site, cooperative, practicum, internship, and/or licensure/certification opportunity may be impacted. If you have any questions or concerns, please contact your program director and check with your licensing/certifying entity, if any, to determine your status.

The Welding program will be housed at the Plano campus in room A185. The department has a foundry and TIG, MIG and stick welders.

Students planning to transfer to a college or university should check with the Collin College academic advisors. Also check the degree requirement of the intended transfer college prior to beginning this program to verify course degree applicability.

AAS – Welding

60 credit hours

FIRST YEAR**First Semester**

First 8 Weeks

WLDG 1407 Introduction to Welding Using Multiple Processes

WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)

Second 8 Weeks

WLDG 1430 Introduction to Gas Metal Arc Welding (GMAW)

WLDG 1434 Introduction to Gas Tungsten Arc (GTAW) Welding

Second Semester

First 8 Weeks

WLDG 1313 Introduction to Blueprint Reading for Welders

WLDG 2447 Advanced Gas Metal Arc Welding (GMAW)

Second 8 Weeks

WLDG 1317 Introduction to Layout and Fabrication

WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW)

SECOND YEAR**First Semester**

First 8 Weeks

WLDG 1435 Introduction to Pipe Welding

WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW)

Second 8 Weeks

SPCH 1321 Business and Professional Communication (See [Speech](#) options)

WLDG 2371 Advanced Welding in Aerospace Applications

Second Semester

ENGL 1301 Composition I

GEN ED [Mathematics](#) course

GEN ED [Humanities/Fine Arts](#) course

GEN ED [Social/Behavioral Sciences](#) course

WLDG 2435 Advanced Layout and Fabrication ¹
 (Capstone)

1. May substitute WLDG 2480 with consent of Associate Dean/Director

Certificate Level 1 – Entry Welding Certification

16 credit hours

FIRST YEAR**First Semester***First 8 Weeks*

- WLDG 1407 Introduction to Welding Using Multiple Processes
- WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)

Second 8 Weeks

- WLDG 1430 Introduction to Gas Metal Arc Welding (GMAW)
- WLDG 1434 Introduction to Gas Tungsten Arc (GTAW) Welding (Capstone)

Certificate Level 1 – Gas Shielded Welding Certification

30 credit hours

FIRST YEAR**First Semester***First 8 Weeks*

- WLDG 1407 Introduction to Welding Using Multiple Processes
- WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)

Second 8 Weeks

- WLDG 1430 Introduction to Gas Metal Arc Welding (GMAW)
- WLDG 1434 Introduction to Gas Tungsten Arc (GTAW) Welding

Second Semester*First 8 Weeks*

- WLDG 1313 Introduction to Blueprint Reading for Welders
- WLDG 2447 Advanced Gas Metal Arc Welding (GMAW)

Second 8 Weeks

- WLDG 1317 Introduction to Layout and Fabrication
- WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW) (Capstone)

Certificate Level 2 – Welding Technology Certification

44 credit hours

*Students must be TSI complete.***FIRST YEAR****First Semester***First 8 Weeks*

- WLDG 1407 Introduction to Welding Using Multiple Processes
- WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)

Second 8 Weeks

- WLDG 1430 Introduction to Gas Metal Arc Welding (GMAW)
- WLDG 1434 Introduction to Gas Tungsten Arc (GTAW) Welding

Second Semester*First 8 Weeks*

- WLDG 1313 Introduction to Blueprint Reading for Welders
- WLDG 2447 Advanced Gas Metal Arc Welding (GMAW)

Second 8 Weeks

- WLDG 1317 Introduction to Layout and Fabrication
- WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW)

Third Semester*First 8 Weeks*

- WLDG 1435 Introduction to Pipe Welding
- WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) (Capstone)

Second 8 Weeks

- SPCH 1321 Business and Professional Communication (See [Speech](#) options)
- WLDG 2371 Advanced Welding in Aerospace Applications

BACCALAUREATE DEGREE PROGRAMS

BACCALAUREATE DEGREE PLANS BY PROGRAM

CLINICAL OPERATIONS MANAGEMENT

Program Option:

Bachelor of Applied Science (BAS) in Clinical Operations Management

The Bachelor of Applied Science (BAS) in Clinical Operations Management is designed for students with associate degrees in Allied Health/Health Sciences seeking higher level employment opportunities within healthcare organizations. The BAS in Clinical Operations Management will prepare students for advancement within healthcare organizations by offering leadership and managerial topics including business principles, talent management, project management, data analysis, and risk management. All courses are conducted online and may be taken on a part-time or full-time basis.

Admission to the BAS in Clinical Operations Management program requires a) admission to Collin College, b) completion of an Associate of Applied Sciences degree in an Allied Health/Health Sciences/Emergency Services field that prepares students for clinical care or the systematic review of clinical care, and c) completion of an application to the BAS in Clinical Operations Management. Registration for upper division courses is limited solely to those students that have been admitted to the BAS program in Clinical Operations Management. Information may be obtained by contacting the Health Sciences and Emergency Services Division Office at 972.548.6678 or visiting the website <https://www.collin.edu/department/hses/>.

Allied health/Health Sciences/Emergency Services disciplines that prepare students to provide clinical care or to systematically review clinical care include, but are not limited to, disciplines such as:

- Anesthesia Technology/Technician
- Dental Hygiene
- Diagnostic Medical Sonography
- Emergency Medical Services
- Fire Science (with paramedic training)
- Health Information Management/Technology
- Health Professions (Electrocardiographic Technology track, EMT track, Nurse's Aide track, Patient Care Technician track, Phlebotomy track)
- Medical Assisting
- Occupational Therapy
- Physical Therapy Assisting
- Polysomnographic Technology
- Radiation Technology
- Respiratory Therapy
- Surgical Technology

AAS degrees in other allied health/allied sciences/emergency services disciplines may be eligible for admission after approval by the Associate Dean of Health Sciences and Emergency Services (HSES).

The BAS in Clinical Operations Management requires completion of 120 semester credit hours (SCH) of coursework as outlined below.

Coursework Outline

A. Technical Coursework – up to 44 credit hours

Students admitted to the program will have up to a maximum of 44 semester credit hours of technical (i.e. workforce education) coursework completed in their AAS degrees applied to the degree requirements for the BAS degree. Should students earn less than 44 SCH of technical coursework in their AAS degree, any required hours remaining to meet the BAS

degree requirements will be designated as electives that can be fulfilled with any lower division course credits not used to fulfill another baccalaureate degree requirement.

B. Core Curriculum/General Education Coursework – 42 credit hours

All students completing a baccalaureate degree, including the BAS in Clinical Operations Management, must complete 42 SCH of core curriculum/general education courses as required by Collin College. Core curriculum/general education courses may be completed at Collin College or transferred from another institutionally accredited institution of higher education, and many of these required courses may be applied toward the BAS degree requirements from general education/core curriculum courses completed as part of the AAS degree.

C. Upper Division Coursework

The remaining 34 SCHs of the degree requirements constitute the upper division medical/health sciences management courses.

BAS – Clinical Operations Management

120 credit hours

42 SCH General Education Core

Credit Hours

010 Communication Component 6 SCH

ENGL 1301 Composition I

3

ENGL 1302 Composition II or ENGL 2311 Technical Writing

3

020 Mathematics Component 3 SCH

MATH 1342 Elementary Statistical Methods (or other [Mathematics](#) core)

030 Life & Physical Sciences Component 6 SCH

GEN ED [Science Course](#) (1 lab hour applies to Component 090)

3

GEN ED [Science Course](#) (1 lab hour applies to Component 090)

3

040 Language, Philosophy & Culture 3SCH

GEN ED [Language, Philosophy & Culture Course](#)

3

050 Creative Arts Component 3 SCH

GEN ED [Creative Arts Course](#)

3

060 American History Component 6 SCH

GEN ED [History Course](#)

3

GEN ED [History Course](#)

3

070 Government/Political Science Component 6 SCH

GOVT 2305 Federal Government (Federal constitution and topics)

3

GOVT 2306 Texas Government (Texas constitution and topics)

3

080 Social and Behavioral Science Component 3 SCH

GEN ED [Social/Behavioral Sciences Course](#)

3

090 Collin options 6 SCH

GEN ED [Speech Course](#)

3

GEN ED 1 lab hour from 030 Component applies

1

GEN ED 1 lab hour from 030 Component applies

1

GEN ED Any extra hour of core applies here or student can take a 1-hour course that applies to core

1

Total 42

Lower Division Transfer Coursework*Will accept up to 44 credit hours of technical component (Healthcare emphasis)***Total 44****Upper Division Coursework****Credit Hours****Third Year****First Semester**

MHSM 3315 Population Health	3
MHSM 3313 Data Analysis and Presentation Development	3
Core Curriculum/Electives	

Second Semester

MHSM 3311 Healthcare Technology Information	3
MHSM 3320 Fundamentals of Business Healthcare	3
Core Curriculum/Electives	

Fourth Year**First Semester**

MHSM 4302 Healthcare Quality and Risk Management	3
MHSM 3310 Legal Issues in Healthcare	3
MHSM 4315 Project Management	3
MHSM 3335 Financial Management for Healthcare	3
Core Curriculum/Electives	

Second Semester

MHSM 3305 Leadership for Healthcare Organizations	3
MHSM 4312 Talent Management in Healthcare	3
MHSM 4440 Case Analysis in Healthcare Management (Capstone)	4
Core Curriculum/Electives	

Total Years 3 & 4 34**Grand Total 120**

To be eligible to graduate with a BAS degree from Collin College, all students must complete a minimum of 25% of the coursework (30 SCH) required for the degree at Collin College.

CONSTRUCTION MANAGEMENT

Department Website:

<http://www.collin.edu/department/constructionmanagement/>

Program Option:

Bachelor of Applied Science (BAS) in Construction Management

Construction Management provides a professional service for effectively managing a construction project's function, schedule, scope, cost, safety and quality from the project's beginning to its conclusion. The BAS in Construction Management degree will prepare students for advancement within the Construction Management field by teaching successful graduates a wide range of marketable skills including management principles; scheduling, planning and cost estimating for construction projects; behavior of building structures/components; principles of mechanical, electrical, and plumbing systems; project safety; and risk management.

ADMISSIONS REQUIREMENTS

Admission to the BAS-Construction Management requires departmental approval. Admission to the college does not guarantee admission to the BAS-Construction Management. Registration into upper division courses is by departmental permission only.

Eligibility requirements/admission steps:

- Complete an Associate of Applied Science (AAS) degree in Construction Management or closely related degree from an institutionally accredited college/university.
- Current students must be enrolled in their final semester of courses to complete their AAS at the time of application to the BAS program.
- Complete an application for admission to Collin College (if not a current Collin College student).
- Submit official transcripts from all prior colleges/universities, if applicable.
- Once a College-Wide Identification (CWID) Number has been received, complete a Request for Transfer Credit Evaluation (in CougarWeb under the Home Tab), if applicable.
- Complete departmental admissions requirements per departmental communication.
- Attend the mandatory BAS-Construction Management student orientation prior to registration.

The academic records of students completing the admissions requirements will be reviewed by the department for specific coursework that can be transferred into Collin College and applied toward the BAS-Construction Management degree program. Students will either be admitted into the BAS program or not admitted into the BAS program and directed to work with Student Enrollment Services and/or the Workforce Programs

Career Coach to devise a plan to complete the required coursework necessary to be admitted to the BAS program in future terms.

BAS – Construction Management

120 credit hours

FIRST YEAR - AAS

First Semester

CNBT	1311	Construction Materials and Methods I
CNBT	2342	Construction Management I
<u>ECON</u>	<u>1301</u>	<u>Introduction to Economics</u> (See Social/Behavioral Sciences options)
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)
OSHT	1305	OSHA Regulations - Construction Industry

Second Semester

CNBT	2304	Construction Methods and Materials II
CNBT	1300	Residential and Light Commercial Construction Drawings
<u>ENVR</u>	<u>1401</u>	<u>Environmental Science I</u> (See Life & Physical Sciences options)
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

Third Semester

CNBT	1280	Cooperative Education - Construction Engineering Technology/Technician
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SECOND YEAR - AAS

First Semester

CNBT	1359	Project Scheduling
CNBT	1346	Construction Estimating I
CNBT	1342	Building Codes and Inspections
CNBT	2310	Commercial/Industrial Blueprint Reading
<u>PHIL</u>	<u>2306</u>	<u>Introduction to Ethics</u> ¹

Second Semester

BMGT	1305	Communications in Management
CNBT	2340	Mechanical, Plumbing & Electrical Systems in Construction II (Commercial)
CNBT	1315	Field Engineering I
CNBT	2344	Construction Management II

THIRD YEAR - BAS

First Semester

BUSINESS ELECTIVE *

ABSC	3410	Applied Building Sciences
<u>KINE</u>	<u>1164</u>	<u>Introduction to Physical Fitness and Wellness</u> ²

CMGT	3305	Construction Estimating II
CMGT	3310	Building Information Modeling for Constructors

Second Semester

<u>ENVR</u>	<u>1402</u>	<u>Environmental Science II</u> (See Life & Physical Sciences options)
<u>ARTS</u>	<u>1313</u>	<u>Foundations of Art</u> (See Fine Arts options)
<u>ENGL</u>	<u>2311</u>	<u>Technical and Business Writing</u> (See Communication options)
CMGT	3315	Construction Structural Systems
CMGT	3320	Construction Project Planning

FOURTH YEAR - BAS

First Semester

<u>HIST</u>	<u>X3XX</u>	See American History options
<u>GOVT</u>	<u>2305</u>	<u>Federal Government (Federal constitution and topics)</u>
CMGT	4305	Construction Materials Testing and Inspections
CMGT	4310	Construction Soils and Foundations
CMGT	4315	Construction Project Management

Second Semester

<u>HIST</u>	<u>X3XX</u>	See American History options
<u>GOVT</u>	<u>2306</u>	<u>Texas Government (Texas constitution and topics)</u>
CMGT	4320	Construction Law and Ethics
CMGT	4325	Construction Leadership
CMGT	4330	Construction Management Capstone

* *Business electives (3 credit hours): BUSI 2301-business law is recommended. Any BUSI, BMGT, BUSG, ECON, or ACCT Course not already fulfilling a degree requirement above.*

1. No course substitutions
2. May substitute educ 1100 or any core course not used to Meet the requirement of another component.

CYBERSECURITY

Program Option: Bachelor of Applied Technology (BAT) in Cybersecurity

With high-profile information breaches and identity thefts in the news regularly, the need to secure data and the systems that store it has never been more important. Play your part in keeping important information safe with a certificate or degree from Collin College's Information Systems Cybersecurity program.

Building on a strong networking and operating systems foundation that provides students with the prerequisite knowledge to be successful in cybersecurity, the BAT in Cybersecurity provides students with a hands-on program covering multiple aspects of cybersecurity including

penetration testing, defensive operations, basic cryptography, privacy, cybercrime, and cyber policy.

ADMISSIONS REQUIREMENTS

Admission to the BAT-Cybersecurity Program is selective. Admission to the college does not guarantee admission to the BAT-Cybersecurity Program. Registration into upper division courses is by departmental permission only. Information and applications may be obtained from the BAT-Cybersecurity website:
<https://www.collin.edu/department/cybersecurity/index.html>.

- Complete an associate degree in Information Security/Information Systems Cybersecurity (AAS) or closely related degree from an accredited educational institution
- Complete an application for admission to Collin College
- Submit official transcripts from all colleges/universities
- Once a CWID has been provided, complete a Request for Transfer Credit Evaluation (in CougarWeb under Home Tab)
- Complete departmental admissions requirements per departmental communication
- Attend the mandatory BAT-Cybersecurity student orientation prior to enrollment
- Submit a completed Ethical Obligation form prior to enrollment

The academic records of students completing the admissions requirements will be reviewed by the department for specific coursework that can be transferred into Collin College and applied toward the BAT-Cybersecurity degree program. Students will either be admitted into the BAT program or not admitted into the BAT program and directed to work with academic advisors to devise a plan for how to complete the required coursework necessary to be admitted to the BAT program.

BAT – Cybersecurity

120 credit hours

Many CPMT, ITCC, ITMT, ITNW (except ITNW 2374), ITSC, and ITSY courses are offered in eight-week express sessions.

FIRST YEAR - AAS

First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
<u>ENGL</u>	<u>1301</u>	<u>Composition I</u>
ITNW	1358	Network+
ITSY	1371	OSINT and Introductory Security Analysis
ITSY	2300	Operating System Security

Second Semester

ITCC	1314	CCNA 1: Introduction to Networks
ITSC	1316	Linux Installation and Configuration
ITSY	1300	Fundamentals of Information Security
ITSY	1372	Cyber-Psychology and the Effects of Emerging Technology
ITSY	2301	Firewalls and Network Security Design

SECOND YEAR - AAS**First Semester**

ITCC	1344	CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)
ITSY	2330	Intrusion Detection
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Communication</u> (See Speech options)

ELECTIVE *

Second Semester

<u>ECON</u>	<u>2302</u>	<u>Principles of Microeconomics</u> (See Social/Behavioral Sciences options)
ITSC	1342	Shell Programming - Scripting
ITSY	2341	Security Management Practices
ITSY	2343	Computer System Forensics
<u>PHIL</u>	<u>2303</u>	<u>Introduction to Formal Logic</u> (See Humanities options)

THIRD YEAR - BAT**First Semester**

CYBR	3310	Introduction to Cryptography
CYBR	3320	Digital and Device Forensics
CYBR	3330	Advanced Network Topologies and Protocols
CYBR	3340	Cyber Crime
<u>ENGL</u>	<u>2311</u>	<u>Technical and Business Writing</u> (See Communication options)

Second Semester

CYBR	3350	Cyber Privacy
CYBR	3360	Mobile Technologies
CYBR	4310	Penetration Testing
<u>GOVT</u>	<u>2305</u>	<u>Federal Government (Federal constitution and topics)</u>
<u>PHYS</u>	<u>1415</u>	<u>Physical Science I</u> (See Life & Physical Sciences options)

FOURTH YEAR - BAT**First Semester**

CYBR	4320	Cyber Defense Operations
CYBR	4330	Virtualization and Cloud Security
CYBR	4340	Information Assurance
<u>ENVR</u>	<u>1401</u>	<u>Environmental Science I</u> (See Life & Physical Sciences options)
<u>HIST</u>	<u>1301</u>	<u>United States History I</u> (See American History options)

Second Semester

CYBR	4350	Senior Project (Capstone)
<u>GOVT</u>	<u>2306</u>	<u>Texas Government</u> (Texas constitution and topics)
<u>HIST</u>	<u>1302</u>	<u>United States History II</u> (See American History options)
<u>KINE</u>	<u>1164</u>	<u>Introduction to Physical Fitness and Wellness</u> (See Collin options)
<u>GEN ED</u>		Creative Arts course

* *Elective (3 credit hours):* *ITSY 2572 (recommended) or any ITCC, ITMT, ITNW, or ITSY course not listed above.*

RN-TO-BSN PROGRAM**Department website:**

<http://www.collin.edu/nursing>

Program Option:**Bachelor of Science in Nursing (BSN)****RN-to-BSN**

Advance: your Degree- your Career- your Life.

The RN-to-BSN is a post licensure program designed to prepare the students with an understanding of: nursing, health and healing, the environment, and persons as diverse individuals, families, populations, and communities.

The graduate of the Collin College RN-to-BSN Program is prepared to:

- Use clinical reasoning and knowledge based on the nursing program of study, evidence-based practice outcomes, and research studies as the bases for decision-making and comprehensive, safe patient and population care.
- Demonstrate inquiry and analysis in applying patient care technologies and information systems to support safe nursing practice and population risk reduction.
- Develop safety and quality improvement activities as part of the interdisciplinary team and as an advocate and manager of nursing care.
- Educate on changes in health status and promote population risk reduction with diverse communities in collaboration with members of the interdisciplinary health care team.
- Monitor institutional, professional, and public policy to maintain adherence to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.
- Demonstrate leadership skills related to financial, human resource, clinical, and professional issues in providing and evaluating care
- Demonstrate leadership and advocacy that reflect the values and ethics of the nursing profession

A Bachelor of Science in Nursing (BSN) will be awarded based upon achieving satisfactory score(s) in all courses.

FUNCTIONAL ABILITIES/CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities/Core Performance Standards documents provided in the program information on the Nursing website <http://www.collin.edu/nursing>. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

SCHOLARSHIPS

Various scholarships are available to students when they have been accepted into the Nursing Program. Most scholarships are awarded based on financial need. Other types of monetary support are available through the college's Financial Aid Office.

FINANCIAL RESPONSIBILITIES

Students assume financial responsibility for: tuition, fees, books, and other possible requirements to complete the degree such as uniforms, immunizations, transportation (may include clinical parking passes), clinical accessories/equipment, drug testing, health coverage, testing and tutorial software, and personal computers.

ADMISSIONS REQUIREMENTS

Admission to the Nursing RN-to-BSN Program is selective. Admission to the college does not guarantee admission to the RN-to-BSN Program. Registration into upper division nursing courses is by permission only. Information and applications may be obtained from the Nursing Office or the Nursing website: <http://www.collin.edu/nursing>.

- Complete an application for admission to Collin College.
- The RN-to-BSN program is for Registered Nurses. Must hold a current Texas unencumbered RN license or an enhanced nurse license compact (eNLC)-multi state license. Graduate nurses (GN's) may apply and be conditionally admitted to the program but must pass the NCLEX before starting course work.
- Submit official transcripts from all colleges/universities that have pre-program requirement course work to be considered and list the awarding of an associate degree in nursing.

- Complete an associate degree in nursing from an accredited educational institution.
- Minimum overall grade point average of 2.5 on a 4.0 scale.
- Must be within six (6) to eight (8) credit hours of completion of the Texas Common Core Curriculum at time of application: All general education courses and pre-program requirement course work must be completed prior to registering for upper division Nursing courses.

Students will need to complete a practicum project to finish the program. Students may need to complete clinical requirements as required by a facility. These situations should be discussed with the program director as soon as identified so a plan can be developed to gain entry to the facility.

Prior to enrollment in upper division nursing courses: Students who will be earning a baccalaureate degree from Collin College MUST satisfy ALL course work requirements of the Texas core curriculum. Collin College will ensure students transferring into the RN-to-BSN program have completely met the core objectives defined by the Texas Higher Education Coordinating Board which encompasses the 42-semester credit hour requirement. Academic advisors are available at each campus to assist students in evaluation of prior course work and selection of equivalent courses. The following semester hours must be completed prior to enrollment in upper-division nursing courses.

BSN - Nursing

120 credit hours

AAS - Nursing (RN)

60 credit hours

PRE-PROGRAM REQUIREMENTS

BIOL 2401 Anatomy and Physiology I^{1,2}
BIOL 2402 Anatomy and Physiology II^{1,2}
 BIOL 2420 Microbiology for Non-Science Majors^{1,3}

FIRST YEAR

First Semester

PSYC 2301 General Psychology¹
 RNSG 1125 Professional Nursing Concepts I
 RNSG 1128 Introduction to Health Care Concepts
 RNSG 1161 Clinical I – Nursing – Registered Nurse Training
 RNSG 1216 Professional Nursing Competencies
 RNSG 1430 Health Care Concepts I

Second Semester

PSYC 2314 Life-Span Growth and Development¹
 RNSG 1126 Professional Nursing Concepts II

RNSG	1533	Health Care Concepts II
RNSG	2361	Clinical II – Nursing – Registered Nurse Training

SECOND YEAR

First Semester

<u>ENGL</u>	<u>1301</u>	<u>Composition I</u> ¹
RNSG	1137	Professional Nursing Concepts III
RNSG	1538	Health Care Concepts III
RNSG	2362	Clinical III – Nursing – Registered Nurse Training

Second Semester

RNSG	2138	Professional Nursing Concepts IV (Capstone)
RNSG	2363	Clinical IV – Nursing – Registered Nurse Training
RNSG	2539	Health Care Concepts IV
<u>GEN ED</u>		<u>Humanities / Fine Arts</u> course ⁴

The above sequence is for students earning their AAS in Nursing at Collin College. For those earning an AAS in nursing at another institution, Collin College will accept up to 36 hours of lower-division nursing credit from an Associate Degree in nursing.

30 hours coursework program requirements

THIRD YEAR – Preparation for Upper Division Nursing Courses

First Semester

BIOL	1322	Nutrition and Diet Therapy
<u>ENGL</u>	<u>1302</u>	<u>Composition II</u> ¹
<u>SPCH</u>	<u>1321</u>	<u>Business and Professional Speaking</u> (See Speech options)
<u>GOVT</u>	<u>2305</u>	<u>Federal Government (Federal constitution and topics)</u>
<u>GEN ED</u>		<u>History</u> course ⁵

Second Semester

CHEM	1306	Introductory Chemistry: General, Organic and Biological ^{1,7}
<u>GOVT</u>	<u>2306</u>	<u>Texas Government (Texas constitution and topics)</u>
<u>MATH</u>	<u>1342</u>	<u>Elementary Statistical Methods</u> (See Mathematics options)
<u>PHIL</u>	<u>2306</u>	<u>Introduction to Ethics</u> ⁶ (See Humanities / Fine Arts options)
<u>GEN ED</u>		<u>History</u> course ⁵

1. Course must be completed with a grade of C or above prior to enrolling in the nursing program

2. No course substitutions or CLEP credit

3. May substitute BIOL 2421

4. Options include: ARTS 1301, 1303, 1304, 1313; DANC 2303; DRAM 1310, 2361, 2362, 2366; MUSI 1306, 1307 or 1310

5. Must complete six (6) hours from the following options: HIST 1301, 1302, 2301

6. PHIL 2306 is preferred. Other options include: ENGL 2322, 2323, 2327, 2328, 2332, 2333, or 2341; HIST 2311, 2312, 2321, 2322; HUMA 1301; PHIL 1301, 1304, 2307, 2321
7. May substitute CHEM 1405 or CHEM 1411 * Note - certain advance practice programs may require a Chemistry with a lab.

30 hours coursework upper division nursing

FOURTH YEAR – BSN – Full-time

First Semester

NURS	3210	Transitions to the BSN Role
NURS	3220	Health Promotion Across Lifespan
NURS	3330	Ethics in Health Care
NURS	3340	Population-focused Community Health I
NURS	3350	Advanced Health Assessment
NURS	4235	Health Care Quality

Second Semester

NURS	4115	Healthcare Organization
NURS	4225	Nursing Informatics
NURS	4345	Population-focused Community Health II
NURS	4355	Research and Evidence-Based Practice
NURS	4354	Professional Project
NURS	4365	Leadership and Management

OR

30 hours coursework upper division nursing

FOURTH YEAR – BSN – Part-time

First Semester

NURS	3210	Transitions to the BSN Role
NURS	3220	Health Promotion Across Lifespan
NURS	3350	Advanced Health Assessment

Second Semester

NURS	3340	Population-focused Community Health I
NURS	4115	Healthcare Organization
NURS	4235	Health Care Quality

Third Semester

NURS	3330	Ethics in Health Care
NURS	4345	Population-focused Community Health II

Fourth Semester

NURS	4225	Nursing Informatics
NURS	4355	Research and Evidence-Based Practice
NURS	4354	Professional Project
NURS	4365	Leadership and Management

† To be eligible to graduate with a BSN degree from Collin College, all students must complete a minimum of 25% of the coursework (30 SCH) required for the 120 SCH degree in residence at Collin College.

COURSE DESCRIPTIONS

UNDERSTANDING COURSE TYPES AND CREDIT HOURS

Types of Courses Offered by Collin College:

Collin College offers four types of courses that are defined below:

- Academic Transfer courses are freshman and sophomore level courses intended to be transferred toward a bachelor's degree (i.e. BA or BS degrees) at four-year colleges or universities in traditional academic disciplines. Additionally, academic transfer courses serve as Core Curriculum/General Education courses in all of Collin College's degree programs.
- Workforce courses are freshman and sophomore level courses intended to train graduates for employment in specific fields/disciplines upon graduation from Collin College. While these courses may apply toward applied baccalaureate degrees (i.e. BAS, BAT, BAAS, BSN, etc. degrees) at two- and four-year colleges and universities they generally do not transfer into or apply toward a BA or BS degree in traditional academic disciplines at four-year institutions of higher education. Some programs may have transfer or articulation agreements in place to facilitate transfer of workforce courses; however, students should check with an academic advisor or transfer institution for more information.
- Upper Division courses are junior or senior level workforce courses in applied baccalaureate (e.g. BAS, BAT, BSN) degrees offered by Collin College.
- Developmental courses are pre-college level courses that do not apply to an associate or baccalaureate degree and do not transfer to a four-year college or university.
- Continuing Education courses may apply toward training or meet licensure/certification requirements for professional development, but they do not earn college credit and, as a result, generally do not apply toward associate degrees, baccalaureate degrees, and related certificates. Some continuing education courses may qualify for Prior Learning Assessment (PLA) opportunities in specific departments. Students should reference the PLA section of this catalog and talk with their academic department for additional information.

Course Numbering System:

Course rubrics and numbers contain useful information. In the Texas Common Course Numbering System (TCCNS) each course is identified by a four-character "rubric" (i.e. discipline abbreviation) and a 4-digit number. The rubric is always four upper-case alphabetic characters; and the course number is a four digit number that denotes additional information as explained below:

Rubric	1 st Digit	2 nd Digit	3 rd and 4 th Digits
The rubric is a four character alphabetic indicator of the academic discipline of the course.	The 1st digit indicates the level of the course: 0 = Pre-College Level 1 = Freshman Level 2 = Sophomore Level 3 = Junior Level 4 = Senior Level	The second digit indicates the amount of credit (in semester credit hours, SCHs) awarded upon successful completion of the course.	The third and fourth digits are used to uniquely identify the sequence of courses that are taught under a specific course rubric.

Consider the course "ACCT 2301." This label indicates an accounting course, taught at the sophomore level, granting 3 SCH's upon successful completion, and is an early course in the sequence of courses offered under the ACCT rubric.

Course numbers beginning with a 0 include developmental education courses, English as a Second Language courses, and related pre-college level courses that prepare students to be successful in college-level coursework. These courses do not award college-level credit, and therefore do not award credit toward college degrees or other awards, nor do they transfer.

Course numbers beginning with a value of 1 or higher are considered college-level credit courses. Completion of a college level credit course with a grade of “D” or higher will earn college credit.

Earned Course Credit Hours

Credit hours are earned upon successful completion of college credit courses. Each degree, certificate or award requires the completion of a specific number of SCHs. The second digit in a course number indicates the number of credit hours earned upon successful completion of the course.

COURSE RUBRICS

Course descriptions are listed alphabetically by rubrics. Rubrics can be found below and on the following pages, listed by subject and by rubric.

ALPHABETIZED SUBJECT LIST

Subject/Rubric Title	Subject/ Rubric	Subject/Rubric Title	Subject/ Rubric
Accounting	ACCT	Culinary - Nutrition	IFWA
Accounting/Office Systems	ACNT	Culinary Arts	CHEF
Agriculture	AGRI	Cybersecurity	CYBR
Agriculture	AGCR	Dance	DANC
Air Force ROTC	AERS	Dental Hygiene	DHYG
Anthropology	ANTH	Developmental Refresher-Math	NCBM
Applied Building Science	ABSC	Diagnostic Electrocardiography	DSAE
Applied Mathematics, Gen	TECM	Diagnostic Medical Sonography	DMSO
Arabic	ARAB	Echocardiography	DSPE
Army ROTC	MILS	Economics	ECON
Arts/Photography	ARTS	Education	EDUC
Athletic Program Planning	RECL	Elect/Electronic Comm	EECT
Automotive Technology	AUMT	Electrical	ELPT
Bank & Fin Support Services	BNKG	Electrocardiography	ECRD
Biology	BIOL	Electromechanical Technology	ELMT
Biotechnology	BITC	Electronic Engineering	ENTC
Building Science	ABSC	Electronic Engineering/Equip	INTC
Business - Human Resource	HRPO	Electronic Technology	CETT
Business Administration	BUSI	Emergency Medical Servs	EMSP
Business Management	BMGT	Engineering	ENGR
Carpentry	CRPT	Engineering Technology	BIOM
Chemistry	CHEM	English	ENGL
Child Development	CDEC	Environmental Science	ENVR
Child Development/Teaching	TECA	Environmental Science and Technology	OSHT
Chinese	CHIN	ESL Grammar	ESLG
Collision Technology	ABDR	ESL Listening/Convers	ESLC
Comm Design - Anim/Video	FLMC	ESL Reading	ESLR
Comm Design - Animation	ARTV	ESL Skills Development	ESLX
Comm Design - Game	GAME	ESL Writing	ESLW
Comm Design - Graphic	ARTC	Fire Technology	FIRT
Comm Design - User	UXUI	Firefighter	FIRS
Comm Design - Video	RTVB	French	FREN
Comm/Jour/Spch/Phot	COMM	Geographic Information Systems	GISC
Comp Aided Drafting/Design	DFTG	Geography	GEOG
Computer Aided Drafting	ARCE	Geology	GEOG
Computer Applications	ITSW	German	GERM
Computer Information Systems	ITSC	Gerontological Services	GERS
Computer Maintenance Tech	CPMT	Government	GOVT
Computer Media/Graph Design	IMED	Health Info - Medical	HPRS
Computer Networking	ITCC	Health Info Technology	HITT
Computer Networking Tech	ITNW	Health/Surg/Emergency Med Services	MDCA
Computer Programming	INEW	Heating, Ventilation & Air Conditioning	HART
Computer Science	COSC	History	HIST
Computer Systems	BCIS	Horticulture Technology	HALT
Computer Systems Security	ITSY	Hotel - Management	RSTO
Computer/Web Programming	ITSE	Hotel - Tourism	TRVM
Construction Management	CMGT	Hotel/Restaurant Mgmt	HAMG
Construction Management	CNBT	Humanities	HUMA
Criminal Justice	CRIJ		

Subject/Rubric Title	Subject/ Rubric	Veterinary/Animal Tech Subject/Rubric Title	VTHT Subject/ Rubric
Insurance	INSR		
Integrated Read/Writing	INRW	Vocational Nursing	VNSG
Interior & Arch Design	INDS	Welding Technology/Welder	WLDG
Interpreter Prep/Deaf	SLNG		
Investments & Securities	BUSA		
Italian	ITAL		
Japanese	JAPN		
Kinesiology	KINE		
Management MSWinSrv	ITMT		
Marketing	MRKG		
Marketing - Business	BUSG		
Marketing - International	IBUS		
Mathematics	MATH		
Medical/Health Sciences Management	MHSM		
Music	MUSI		
Music Ensemble	MUEN		
Music, Applied	MUAP		
Music, Business	MUSB		
Music, Commercial	MUSC		
Music, Commercial Perform	MUSP		
Nurse Assistant/Aide	NURA		
Nursing	NURS		
Nursing	RNSG		
Nursing Services	NUPC		
Office Admin-Office	POFI		
Office Systems Tech	POFT		
Paralegal/Legal Assistant	LGLA		
Pastry Arts	PSTR		
Pharmacy Technician/Assistant	PHRA		
Philosophy	PHIL		
Phlebotomy	PLAB		
Photography - Commercial	PHTC		
Physical Science/Physics	PHYS		
Physical Therapist Assistant	PTHA		
Plumbing	PFPB		
Polysomnographic Technology	PSGT		
Psychology	PSYC		
Real Estate	RELE		
Respiratory Care	RSPT		
Robotics	RBTC		
Russian	RUSS		
Sign Language	SGNL		
Small Unmanned Aerial Systems	SUAS		
Social Work	SOCW		
Sociology	SOCI		
Spanish	SPAN		
Speech	SPCH		
Sport and Fitness	FITT		
Supply Chain Management	LMGT		
Surgical Assisting	CSFA		
Surgical Technology	SRGT		
Theatre/Drama	DRAM		
Therapeutic Recreation	RECT		
Vascular Technology	DSVT		

ALPHABETIZED RUBRIC LIST

Subject/Rubric Title	Subject/ Rubric	Subject/Rubric Title	Subject/ Rubric
Collision Technology	ABDR	English	ENGL
Applied Building Science	ABSC	Engineering	ENGR
Accounting	ACCT	Electronic Engineering	ENTC
Accounting/Office Systems	ACNT	Environmental Science	ENVR
Air Force ROTC	AERS	ESL Listening/Convers	ESLC
Agriculture	AGCR	ESL Grammar	ESLG
Agriculture	AGRI	ESL Reading	ESLR
Anthropology	ANTH	ESL Writing	ESLW
Arabic	ARAB	ESL Skills Development	ESLX
Computer Aided Drafting	ARCE	Firefighter	FIRS
Comm Design - Graphic	ARTC	Fire Technology	FIRT
Arts/Photography	ARTS	Sport and Fitness	FITT
Comm Design - Animation	ARTV	Comm Design - Anim/Video	FLMC
Automotive Technology	AUMT	French	FREN
Computer Systems	BCIS	Comm Design - Game	GAME
Biology	BIOL	Geography	GEOG
Engineering Technology	BIOM	Geology	GEOL
Biotechnology	BITC	German	GERM
Business Management	BMGT	Gerontological Services	GERS
Bank & Fin Support Services	BNKG	Geographic Information Systems	GISC
Investments & Securities	BUSA	Government	GOVT
Marketing - Business	BUSG	Horticulture Technology	HALT
Business Administration	BUSI	Hotel/Restaurant Mgmt	HAMG
Child Development	CDEC	Heating, Ventilation & Air Conditioning	HART
Electronic Technology	CETT	History	HIST
Culinary Arts	CHEF	Health Info Technology	HITT
Chemistry	CHEM	Health Info - Medical	HPRS
Chinese	CHIN	Business - Human Resource	HRPO
Construction Management	CMGT	Humanities	HUMA
Construction Management	CNBT	Marketing - International	IBUS
Comm/Jour/Spch/Phot	COMM	Culinary - Nutrition	IFWA
Computer Science	COSC	Computer Media/Graph Design	IMED
Computer Maintenance Tech	CPMT	Interior & Arch Design	INDS
Criminal Justice	CRIJ	Computer Programming	INEW
Carpentry	CRPT	Integrated Read/Writing	INRW
Surgical Assisting	CSFA	Insurance	INSR
Cybersecurity	CYBR	Electronic Engineering/Equip	INTC
Dance	DANC	Italian	ITAL
Comp Aided Drafting/Design	DFTG	Computer Networking	ITCC
Dental Hygiene	DHYG	Management MSWinSrv	ITMT
Diagnostic Medical Sonography	DMSO	Computer Networking Tech	ITNW
Theatre/Drama	DRAM	Computer Information Systems	ITSC
Diagnostic Electrocardiography	DSAE	Computer/Web Programming	ITSE
Echocardiography	DSPE	Computer Applications	ITSW
Vascular Technology	DSVT	Computer Systems Security	ITSY
Economics	ECON	Japanese	JAPN
Electrocardiography	ECRD	Kinesiology	KINE
Education	EDUC	Paralegal/Legal Assistant	LGLA
Elect/Electronic Comm	EECT	Supply Chain Management	LMGT
Electromechanical Technology	ELMT	Mathematics	MATH
Electrical	ELPT	Health/Surg/Emergency Med Services	MDCA
Emergency Medical Servs	EMSP	Medical/Health Sciences Management	MHSM

Subject/Rubric Title	Subject/ Rubric
Army ROTC	MILS
Marketing	MRKG
Music, Applied	MUAP
Music Ensemble	MUEN
Music, Business	MUSB
Music, Commercial	MUSC
Music	MUSI
Music, Commercial Perform	MUSP
Developmental Refresher-Math	NCBM
Nursing Services	NUPC
Nurse Assistant/Aide	NURA
Nursing	NURS
Environmental Science and Technology	OSHT
Plumbing	PFPB
Philosophy	PHIL
Pharmacy Technician/Assistant	PHRA
Photography - Commercial	PHTC
Physical Science/Physics	PHYS
Phlebotomy	PLAB
Office Admin-Office	POFI
Office Systems Tech	POFT
Polysomnographic Technology	PSGT
Pastry Arts	PSTR
Psychology	PSYC
Physical Therapist Assistant	PTHA
Robotics	RBTC
Athletic Program Planning	RECL
Therapeutic Recreation	RECT
Real Estate	RELE
Nursing	RNSG
Respiratory Care	RSPT
Hotel - Management	RSTO
Comm Design - Video	RTVB
Russian	RUSS
Sign Language	SGNL
Interpreter Prep/Deaf	SLNG
Sociology	SOCI
Social Work	SOCW
Spanish	SPAN
Speech	SPCH
Surgical Technology	SRGT
Small Unmanned Aerial Systems	SUAS
Child Development/Teaching	TECA
Applied Mathematics, Gen	TECM
Hotel - Tourism	TRVM
Comm Design - User	UXUI
Vocational Nursing	VNSG
Veterinary/Animal Tech	VTHT
Welding Technology/Welder	WLDG

ALPHABETIZED COURSE DESCRIPTIONS

ABDR 1280 Cooperative Education - Autobody/Collision and Repair Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Departmental Permit. 2 credit hours. (W)

ABDR 1281 Cooperative Education - Autobody/Collision and Repair Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Departmental Permit. 2 credit hours. (W)

ABDR 1291 Special Topics in Auto/Automotive Body Repairer

Topics address current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

Advanced Electronics and Safety Systems

An introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis on surface preparation, masking techniques, and refinishing of replacement parts. Lab required. 2 credit hours. (W)

ABDR 1307 Collision Repair Welding

A study of collision repair welding and cutting procedures. Lab required. 3 credit hours. (W)

ABDR 1315 Vehicle Trim and Hardware

A study of vehicle trim and glass service. Lab required. Prerequisite: Departmental Permit. 3 credit hours. (W)

ABDR 1331 Basic Refinishing

An introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis on surface preparation, masking techniques, and refinishing of replacement parts. Lab

required. Prerequisite: Departmental Permit. 3 credit hours. (W)

ABDR 1349 Automotive Plastic and Sheet Molded Compound Repair

A comprehensive course in repair of non-metal composites. Lab required. Prerequisite: Departmental Permit. 3 credit hours. (W)

ABDR 1455 Non-Structural Metal Repair

Demonstrate sheet metal repair skills using mechanical and hydraulic equipment. Emphasis on attachment devices used to straighten and align exterior body panels. Lab required. Prerequisite: Departmental Permit. 4 credit hours. (W)

ABDR 1458 Intermediate Refinishing

Training in mixing and spraying of automotive topcoats. Introduction to partial panel refinishing techniques. Lab required. Prerequisite: ABDR 1331. 4 credit hours. (W)

ABDR 2255 Collision Repair Estimating

An advanced course in collision estimating and development of a damage report utilizing estimating software. Lab required. 2 credit hours. (W)

ABDR 2280 Cooperative Education - Autobody/Collision and Repair Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Departmental Permit. 2 credit hours. (W)

ABDR 2281 Cooperative Education - Autobody/Collision and Repair Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Departmental Permit. 2 credit hours. (W)

ABDR 2347 Advanced Collision Repair Welding

Skill development in the use of advanced welding and cutting processes. Emphasizes current welding procedures and specific repair requirements for

specialized metals. Lab required. Prerequisite/Concurrent Enrollment: ABDR 1307. 3 credit hours. (W)

ABDR 2402 Auto Body Mechanical and Electrical Service

A course in the repair, replacement, and/or service of collision damaged mechanical or electrical systems. Topics include drive train removal, reinstallation and service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting. Lab required. 4 credit hours. (W)

ABDR 2437 Structural Analysis and Damage Repair V

Operation of equipment and the procedures involved in the repair of body structures. Special emphasis on conducting a thorough damage analysis as well as demonstrating proper pulling and anchoring techniques. Lab required. Prerequisite/Concurrent Enrollment: ABDR 2347. 4 credit hours. (W)

ABDR 2441 Major Collision Repair and Panel Replacement

Instruction in preparation of vehicles for major repair processes. Covers interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for reinstallation. Lab required. Prerequisite/Concurrent Enrollment: ABDR 2347. 4 credit hours. (W)

ABDR 2449 Advanced Refinishing

Application of multi-stage refinishing techniques. Advanced skill development solving refinishing problems. Application of multi-stage refinishing techniques with emphasis on formula mixing and special spraying techniques. Lab required. Prerequisite/Concurrent Enrollment: ABDR 1458. 4 credit hours. (W)

ABSC 3410 Applied Building Science

A study of the integration of factors that cause a building to be a working system, including; engineering, architecture, materials, climate and environmental factors. The purpose of building science is to provide predictive capability to optimize the performance and sustainability of a building, understand or prevent building failures, and guide the design and use of new materials, techniques, and technologies. Lab required. Prerequisites: MATH 1342 and CNBT 2344. 4 credit hours.

ACCT 2301 Principles of Financial Accounting

This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and

systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS). Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

ACCT 2302 Principles of Managerial Accounting

This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation. Lab required. Prerequisite: ACCT 2301. 3 credit hours. (A)

ACNT 1303 Introduction to Accounting I

A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. Lab required. 3 credit hours. (W)

ACNT 1311 Introduction to Computerized Accounting

Introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package. Lab required. 3 credit hours. (W)

AERS 1105 The Air Force Today I

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits. AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

AERS 1106 The Air Force Today II

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs

and courtesies, and officer opportunities and benefits. AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

AERS 2103 The Development of Air Power I

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits; AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

AERS 2104 The Development of Air Power II

Introduces students to the U.S. Air Force and the Air Force Reserve Officer Training Corps (AFROTC); includes Officership, professionalism, military customs and courtesies, and officer opportunities and benefits; AFROTC cadets must register for Leadership Laboratory as it complements this course with followership experience. 1 credit hour. (A)

AGCR 2305 Entomology

Study of the morphology, physiology, and classification of the common insect orders and related arthropods with emphasis on species of economic or biological importance. Emphasis on integrated pest management concepts and proper use of pesticides. 3 credit hours. (W)

AGCR 2313 Soil and Water Conservation Management

Study of physical and chemical soil deterioration and loss, water conservation, and principles for protection and maintenance of these resources. Topics include plant/water relationships, water conservation methods, basic terrace engineering principles, sediment loss, and land use plans. 3 credit hours. (W)

AGCR 2371 Introduction to Sustainable Agriculture

Introduce the concept of sustainable agriculture, and examine the impact from social, economic, technological, and environmental perspectives. Integration of crop and livestock management, conservation practices, organic practices, and farming techniques to increase agricultural production, efficiency, and profitability. 3 credit hours. (W)

AGCR 2586 Internship – Crop Production

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: Consent of Associate Dean/Director. 5 credit hours. (W)

AGRI 1325 Marketing of Agricultural Products

Essential marketing functions in the movement of

agricultural commodities and products from producer to consumer. 3 credit hours. (A)

AGRI 1415 Horticulture

Lecture: Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. Lab: Laboratory activities will reinforce the structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. Lab required. 4 credit hours. (A)

AGRI 1419 Introductory Animal Science

Scientific animal production and the importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of livestock. Lab required. 4 credit hours. (A)

AGRI 2303 Agricultural Construction

Safety procedures, selection, use, and maintenance of hand and power tools, metal cutting and welding; and construction materials and principles. 3 credit hours. (A)

AGRI 2317 Introduction to Agricultural Economics

Fundamental economic principles and their application in the agricultural industry. 3 credit hours. (A)

ANTH 2301 Physical Anthropology

The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ANTH 2302 Introduction to Archeology

The study of the human past through material remains. The course includes a discussion of methods and theories relevant to archeological inquiry. Topics may include the adaptation of agriculture, response to environmental change, the emergence of complex societies, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ANTH 2346 General Anthropology

The study of human beings, their antecedents, related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline. Prerequisite: Meet TSI

college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ANTH 2351 Cultural Anthropology

The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ANTH 2389 Academic Co-op Anthropology

Integrates on-campus study with practical hands-on work experience in anthropology. In conjunction with class seminars, the student will set specific goals and objectives in the study of anthropology. Contact the Associate Dean/Director for more information. Prerequisites: Consent of Associate Dean/Director and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ANTH 2401 Physical Anthropology

Lecture: The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. Lab: Includes demonstrations of the major principles of the lecture section. Additionally, an overview of human origins and cultural adaptations combining study of our nearest relatives, the chimpanzees, with the analysis of reproductions of fossil bones. Unit concerning forensic anthropology explains how crimes can be solved from analysis of skeletal material; students work with replicas of human bone. Opportunity to participate in field trip to zoo. Lab required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

ARAB 1411 Beginning Arabic I

This course, which is designed for students with little or no prior training in the language, focuses on developing the four basic skills of speaking, reading, writing and listening, as well as the study of selected aspects of Arabic civilization. Instruction is enhanced by the use of audio and video materials. Lab required. 3 credit hours. (A)

ARAB 1412 Beginning Arabic II

This course is a continuation of ARAB 1411. It continues the development of the four basic skills of speaking, reading, writing and listening, as well as the study of selected aspects of Arabic civilization. Instruction is enhanced by the use of audio and video materials. Lab required. Prerequisite: ARAB 1411 or consent of Associate Dean/Director. 3 credit hours. (A)

ARCE 2352 Mechanical, Electrical and Plumbing (MEP) Systems

Preparation of drawings for mechanical, electrical, and plumbing (MEP) systems with emphasis on applicable

building and energy codes, product references, and specifications for construction. Lab required. Prerequisite: DFTG 1317. 3 credit hours. (W)

ARTC 1302 Digital Imaging I

Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

ARTC 1305 Basic Graphic Design

Graphic design with emphasis on the visual communication process. Topics include basic terminology and graphic design principles. Lab required. 3 credit hours. (W)

ARTC 1313 Digital Publishing I

The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout. Lab included. Prerequisites: ARTC 1302, ARTC 1305 and ARTC 1325. 3 credit hours. (W)

ARTC 1317 Design Communication I

Study of design development relating to graphic design terminology, tools and media, and layout and design concepts. Topics include integration of type, images and other design elements, and developing computer skills in industry standard computer programs. Lab required. Prerequisite/Concurrent Enrollment: ARTC 1327 and ARTC 1353. 3 credit hours. (W)

ARTC 1325 Introduction to Computer Graphics

A survey of design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, digital images, digital publishing, vector-based graphics, and interactive multimedia. Lab required. 3 credit hours. (W)

ARTC 1327 Typography

A study of letterforms and typographic concepts as elements of graphic communication. Emphasis on developing a current, practical typographic knowledge based on industry standards. Lab required. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

ARTC 1349 Art Direction I

Creation of projects in art direction for advertising graphic campaigns for products, services, or ideas. Topics include all campaign procedures from initial research and creative strategy to final execution and presentation of a comprehensive project. Lab required. Prerequisite: ARTC 1302 and ARTC 1317. 3 credit hours. (W)

ARTC 1353 Computer Illustration I

Use of the tools and transformation options of an industry-standard vector drawing program to create

complex illustrations or drawings. Includes principles of layout and design and manipulation of text and graphics. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

ARTC 1359 Visual Design for New Media

Visual design elements as they relate to new media. Emphasizes aesthetics and visual problem solving such as typographic issues, color management, hierarchy of information, image optimization, and effective layout. Lab required. Prerequisites: ARTC 1305, ARTC 1325, and ARTC 2371. 3 credit hours. (W)

ARTC 1392 Special Topics in Design and Visual Communications

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. (W)

Advanced Design and Visual Communication Principles and Techniques

Advance study of design and visual communication topics. Develop student understanding of key industry concepts. Emphasis on improving student proficiency and knowledge of industry demanded skillsets. Students are expected to apply concepts and skillsets learned to industry professional standards. Course key topics may change to reflect industry demands and trends. This course was designed to be repeated multiple times to improve student proficiency. Lab required. Prerequisites: ARTC 1305, ARTC 1353, ARTC 1349, and ARTC 2347 or consent of Associate Dean/Director. 3 credit hours.

ARTC 2305 Digital Imaging II

Principles of digital image processing and digital painting. Emphasis on raster-based imaging and the creative aspects of electronic illustration for commercial or fine art applications. Lab included. Prerequisite: ARTC 1302. 3 credit hours. (W)

ARTC 2311 History of Communication Graphics

Survey of the evolution of graphic arts in relation to the history of art. Includes formal, stylistic, social, political, economic, and historical aspects. Emphasis on art movements, schools of thought, individuals, and technology as they interrelate with graphic arts. 3 credit hours. (W)

ARTC 2335 Portfolio Development for Graphic Design

Preparation of a portfolio comprised of completed graphic design projects. Evaluation and demonstration of portfolio presentation methods based on the student's

specific area of study. Lab required. Prerequisites: ARTC 2347 and consent of Associate Dean/Director. 3 credit hours. (W)

ARTC 2340 Computer Illustration II

Advanced use of software applications and/or various media with emphasis on output procedures, the resolution of complex design issues, and concept development. Lab required. Prerequisite: ARTC 1353. 3 credit hours. (W)

ARTC 2347 Design Communication II

An advanced study of the design process and art direction. Emphasis on form and content through the selection, creation, and integration of typographic, photographic, illustrative, and design elements. Lab required. Prerequisites: ARTC 1302 and ARTC 1327 and ARTC 1353 and ARTC 1317. 3 credit hours. (W)

ARTC 2349 Art Direction II

Mastery of advanced art direction projects with emphasis on selected topics in advertising campaigns. Includes written, oral, and visual skills. Lab required. Prerequisite: ARTC 1349. 3 credit hours. (W)

ARTC 2371 User Experience I

This is an introductory course focusing on the study and application of the user experience design process to develop software product concepts through user and industry research and analytics, generate ideas and solve problems through multi-level design iteration and prototyping, implement design strategy development that provides business solutions and meets business goals, and design professional presentations. Lab required. 3 credit hours. (W)

ARTC 2381 Cooperative Education - Commercial and Advertising Art

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director of the program for further information. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

ARTS 1301 Art Appreciation

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical context.

Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

ARTS 1303 Art History I (Prehistoric to the 14th century)

A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 1304 Art History II (14th century to the present)

A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 1311 Design I (2-dimensional)

An introduction to the fundamental terminology, concepts, theory, and application of two-dimensional design. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 1312 Design II (3-dimensional)

An introduction to the fundamental terminology, concepts, theory, and application of three-dimensional design. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 1313 Foundations of Art

Introduction to the creative media designed to enhance artistic awareness and sensitivity through the creative and imaginative use of art materials and tools. Includes art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth. Additionally, the examination of the change in art creation based on the advancement of tools and materials pushing art production from optic technology in Renaissance painting to mechanical art to technology based art. 3 credit hours. (A)

ARTS 1316 Drawing I

A foundation studio course exploring drawing with emphasis on descriptive, expressive and conceptual approaches. Students will learn to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will engage in critical analysis and begin to develop their understanding of drawing as a discipline. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 1317 Drawing II

A studio course exploring drawing with continued emphasis on descriptive, expressive and conceptual

approaches. Students will further develop the ability to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will employ critical analysis to broaden their understanding of drawing as a discipline.

Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2311 Design III

Studio art course that is a theoretical and practical study of color and composition in art and design. The course consists of studio-based projects using the formal and conceptual aspects of color. The course also examines the functions of color in art from different historical and cultural perspectives. Lab required. Prerequisite: ARTS 1311 or ARTS 1312. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2316 Painting I

Studio art course that introduces the fundamental principles, materials, and techniques of painting. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2317 Painting II

Studio art course that furthers the study of the principles, materials, and techniques of painting. Lab required. Prerequisite: ARTS 2316. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2323 Life Drawing

Studio art course that introduces the analytic study of the human form and the figure's potential for compositional and expressive use in drawing. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2326 Sculpture

A studio art course that introduces the materials, processes, and issues pertaining to the making of three-dimensional objects and environments. The course explores the use of varied materials and techniques along with the formal and conceptual principles that form the basis of contemporary sculpture. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2333 Printmaking I

A studio art course that introduces the materials, processes, and concepts pertaining to traditional and contemporary printmaking. The course explores the use of varied tools and techniques along with the formal and conceptual principles to create editioned and unique

works. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2341 Metals

A studio art course that introduces metalsmithing using basic techniques in jewelry design and metal construction. The course provides instruction and practical fabrication experience as it relates to the design and production of small-scale functional and/or non-functional objects. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2346 Ceramics I

A studio art course that introduces basic building, throwing, and other techniques as it relates to the design and production of ceramic sculpture and pottery. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2347 Ceramics II

A studio art course that furthers the study of building, throwing, and other techniques as it relates to the design and production of ceramic sculpture and pottery. Lab required. Prerequisite: ARTS 2346. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2348 Digital Media

Studio art course that introduces the potential of basic digital media manipulation and graphic creation. The course emphasizes still and time-based media. Additionally, focusing on fine art photography with creative applications. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2356 Photography I

A studio art course that introduces the technical and conceptual basics of photography as a creative medium. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs, including a 35mm SLR camera, film, and photographic paper.

ARTS 2357 Photography II

A studio art course that furthers the study of the technical and conceptual basics of photography as a creative medium. Additionally, a darkroom photography course that will cover advanced cameras and darkroom techniques. Lab required. Prerequisite: ARTS 2356. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2366 Watercolor

Studio art course that introduces the fundamental principles, materials, and techniques of watercolor and

other water-based media. Lab required. 3 credit hours. (A)

Note: Students should expect additional supply costs.

ARTS 2389 Academic Co-op Arts/Photography

Integrates on-campus study with practical hands-on work experience in art/photography. In conjunction with class seminars, the student will set specific goals and objectives in the study of art. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

ARTV 1303 Basic Animation

Examination of animation concepts, principles, and storyboard for basic production. Emphasizes creating movement and expression utilizing traditionally or digitally generated image sequences. Lab required. Prerequisite: ARTC 1325 or ARTV 1351. 3 credit hours. (W)

ARTV 1341 3-D Animation I

Intermediate level 3-D course introducing animation tools and techniques used to create movement. Emphasis on using the principles of animation. Lab required. Prerequisite: ARTV 1345 or consent of Associate Dean/Director. 3 credit hours. (W)

ARTV 1345 3-D Modeling and Rendering I

Techniques of three-dimensional (3-D) modeling utilizing industry standard software. Includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera, light sources, texture, and surface mapping. Lab required. Prerequisite/Concurrent enrollment: ARTC 1325. 3 credit hours. (W)

ARTV 1351 Digital Video

Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a digital video workstation. Lab required. 3 credit hours. (W)

ARTV 1371 Storyboard and Concept Development

Storyboarding for film, video and animation. Visual concept development for linear and interactive media. Lab required. 3 credit hours. (W)

ARTV 2320 Team Program Production I

Students assume roles in a production team using techniques and equipment to create short-form production(s). Lab required. Prerequisites: FLMC 2334 and FLMC 2336. 3 credit hours. (W)

ARTV 2335 Portfolio Development for Animation

A course in the development of a professional portfolio to showcase the student's skills in animation. Includes self-promotion, resumes, portfolio distribution, and

interview techniques. Lab required. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

ARTV 2345 3-D Modeling and Rendering II

A studio course focused on advanced 3-D modeling and rendering techniques using industry standard software, modeling techniques, camera settings, lighting, and surfacing to develop detailed environments. Lab required. Prerequisite: ARTV 1345. 3 credit hours. (W)

ARTV 2351 3-D Animation II

Advanced level 3-D course utilizing animation tools and techniques used to develop movement. Emphasis on advanced animation techniques. Lab required. Prerequisite: ARTV 1341. 3 credit hours. (W)

ARTV 2371 Advanced Skill Development for Animation and Games

An upper level course in the development of concepts and execution of assets for 2D/3D animation and games. The student's incoming skill level and abilities are reviewed and areas of improvement are targeted. Includes the integration of aesthetic and technical skills as introduced in various lower level courses. Lab required. Prerequisite: GAME 2325, or consent of Associate Dean. 3 credit hours. (W)

AUMT 1266 Practicum 1 - Automobile/Automotive Mechanics Technology/Technician

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Lab required. Prerequisite: Departmental Permit. 2 credit hours. (W)

AUMT 1305 Introduction to Automotive Technology

An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and basic automotive maintenance. May be taught manufacturer specific. Lab required. Prerequisite: Departmental Permit. 3 credit hours. (W)

AUMT 1307 Automotive Electrical Systems

An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of, charging and starting systems, and electrical accessories. Emphasis on electrical principles, schematic diagrams, and service publications. May be taught manufacturer specific. Lab required. Prerequisite: Departmental Permit. 3 credit hours. (W)

AUMT 1310 Automotive Brake Systems

Operation and repair of drum/disc type brake systems. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught manufacturer specific. Lab

required. Prerequisite: Departmental Permit. 3 credit hours. (W)

AUMT 1316 Automotive Suspension and Steering Systems

Diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures and tire and wheel service. May be taught manufacturer specific. Lab required. Prerequisite: Departmental Permit. 3 credit hours. (W)

AUMT 1319 Automotive Engine Repair

Fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 1345 Automotive Climate Control Systems

Diagnosis and repair of manual/electronic climate control systems. Includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 1419 Automotive Engine Repair

Fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific. Lab required. Prerequisite/Concurrent Enrollment: AUMT 1307. 4 credit hours. (W)

AUMT 2307 Hybrid and/or Battery Electric Vehicle (BEV) Systems Diagnostics

An advanced study of hybrid and/or battery electric vehicles (BEV) and the unique characteristics of hybrid and/or BEV systems. Includes hybrid and/or BEV safety procedures, diagnosis, and repair of hybrid and/or BEV systems. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2310 Automotive Service Consultant

Automotive service consulting skills and procedures. Includes vehicle identification, product knowledge, shop operations, warranty service contracts, communications, customer relations, internal relations, and sales skills. Emphasizes courtesy, professionalism, and communications. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2313 Automotive Drive Train and Axles

A study of automotive clutches, clutch operation devices, manual transmissions/ transaxles, and differentials with emphasis on diagnosis and repair. May be taught

manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2317 Automotive Engine Performance Analysis I

Theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2321 Automotive Electrical Diagnosis and Repair

Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2325 Automatic Transmission and Transaxle

A study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2334 Automotive Engine Performance Analysis II

Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2337 Automotive Electronics

Study of electronic principles applied to microcomputers and communication systems. Includes digital fundamentals, and use of electronic test equipment. May be taught manufacturer specific. Lab required. Prerequisite: Department Permit. 3 credit hours. (W)

AUMT 2380 Cooperative Education I - Automobile/Automotive Mechanics Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work

experience. Includes a lecture component. Prerequisite: Departmental Permit. 3 credit hours. (W)

AUMT 2381 Cooperative Education II - Automobile/Automotive Mechanics Technology/Technician

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Includes a lecture component. Prerequisite: Departmental Permit. 3 credit hours. (W)

AUMT 2417 Automotive Engine Performance Analysis I

Theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. May be taught manufacturer specific. Lab required. Prerequisite/Concurrent Enrollment: AUMT 2421. 4 credit hours. (W)

AUMT 2421 Automotive Electrical Diagnosis and Repair

Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific. Lab required. Prerequisite/Concurrent Enrollment: AUMT 1307. 4 credit hours. (W)

AUMT 2425 Automotive Automatic Transmission and Transaxle

A study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. May be taught manufacturer specific. Lab required. Prerequisite: AUMT 2421. 4 credit hours. (W)

AUMT 2434 Automotive Engine Performance Analysis II

Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. Lab required. Prerequisite/Concurrent Enrollment: AUMT 2417. 4 credit hours. (W)

AUMT 2437 Automotive Electronics

Study of electronic principles applied to microcomputers and communication systems. Includes digital fundamentals, and use of electronic test equipment. May

be taught manufacturer specific. Lab required.
Prerequisite: AUMT 2421. 4 credit hours. (W)

BCIS 1305 Business Computer Applications

Introduces and develops foundational skills in applying essential and emerging business productivity information technology tools. The focus of this course is on business productivity software applications, including word processing, spreadsheets, databases, presentation graphics, data analytics, and business-oriented utilization of the Internet. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

BIOL 1322 Nutrition and Diet Therapy

This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. 3 credit hours. (A)

BIOL 1323 Nutrition and Diet Therapy II

Applications of nutrition principles and techniques of nutrition care for healthy individuals and patients/clients at nutritional risk. Nutrition risk screening, interviewing/counseling methods, diet evaluation, basic diet calculations, and documentation. 3 credit hours. (A)

BIOL 1406 Biology for Science Majors I

Lecture: Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab: Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

BIOL 1407 Biology for Science Majors II

Lecture: The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab: Laboratory activities will reinforce study of the diversity and classifications of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab required.

Prerequisite: BIOL 1406. 4 credit hours. (A) *Note: This course includes dissection in lab.*

BIOL 1408 Biology for Non-Science Majors I

Lecture: Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab required. 4 credit hours. (A)

BIOL 1409 Biology for Non-Science Majors II

Lecture: This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab required. Prerequisite: BIOL 1408. 4 credit hours. (A)

Note: This course includes dissection in lab.

BIOL 1414 Introduction to Biotechnology I

Overview of classical genetics, DNA structure, the flow of genetic information, DNA replication, gene transcription, protein translation. Principles of molecular biology and genetic engineering techniques, including restriction enzymes and their uses, major types of cloning vectors, construction of libraries, Southern and Northern blotting, hybridization, PCR, DNA typing. Applications of these techniques in human health and welfare, medicine, agriculture and the environment. Introduction to the human genome project, gene therapy, molecular diagnostics, forensics, creation and uses of transgenic plants and animal and animal cloning and of the ethical, legal, and social issues and scientific problems associated with these technologies. Relevant practical exercises in the above areas. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

BIOL 1415 Introduction to Biotechnology II

Lecture to focus on an integrative approach to study biomolecules with an emphasis on protein structures, functions and uses in the modern bioscience laboratory. Students will investigate the mechanisms involved in the transfer of information from DNA sequences to proteins to biochemical functions. The course will integrate biological and chemical concepts with techniques that are used in research and industry. Critical thinking will be applied in laboratory exercises using inquiry-based approaches, troubleshooting and analyzing experimental data. Lab required. Prerequisite/Concurrent enrollment:

BIOL 1414. 4 credit hours. (A) There is an additional fee for this course.

BIOL 2389 Academic Co-op Biology

Integrates on-campus study with practical hands-on work experience in biology. In conjunction with class seminars, the student will set specific goals and objectives in the study of biology. Contact the Associate Dean/Director for more information. Prerequisite: BIOL 1406 or BIOL 1408. 3 credit hours. (A)

BIOL 2401 Anatomy and Physiology I

Lecture: Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Lab: The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. Enrollment in this course is by permission only. Please meet with an academic advisor. BIOL 1406 is strongly recommended. 4 credit hours. (A)

BIOL 2402 Anatomy and Physiology II

Lecture: Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Lab: The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Lab required. Prerequisite: Biology 2401 with a grade of "C" or better within the last five years. 4 credit hours. (A)

BIOL 2404 Human Anatomy and Physiology Basic

A one-semester survey of the structure and function of the human body, including discussion and study of cells,

tissues, organs, and systems. Lab required. 4 credit hours. (A)

BIOL 2406 Environmental Biology

Lecture: Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab: Laboratory activities will reinforce principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab required, including field trips. 4 credit hours. (A)

BIOL 2416 Genetics

Study of the principles of molecular and classical genetics, and the function and transmission of hereditary material. Special emphasis on molecular genetics and genetic engineering. Lab required. Prerequisite: BIOL 1406. 4 credit hours. (A)

BIOL 2420 Microbiology for Non-Science Majors

Lecture: This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. Lab: This course covers basics of culture and identification of bacteria and microbial ecology. This course is primarily directed at pre-nursing and other pre-allied health majors and covers basics of microbiology. Emphasis is on medical microbiology, infectious diseases, and public health. Lab required. Prerequisite: BIOL 2401 with a grade of "C" or better within the last three years, and Prerequisite/Concurrent enrollment in BIOL 2402 with a grade of "C" or better within the last three years. 4 credit hours. (A)

BIOL 2421 Microbiology for Science Majors

Lecture: Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab: Laboratory activities will reinforce principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other,

hosts, and the environment. Lab required. Prerequisites: BIOL 1407 and CHEM 1411. 4 credit hours. (A)

BIOM 1355 Medical Electronic Applications

Presentation of sensors, transducers, and supporting circuits used in medical instrumentation devices. Lab required. 3 credit hours. (W)

BIOM 2201 Safety in Health Care Facilities

Study of codes, standards and management principles related to biomedical instrumentation. Emphasizes application of safety test equipment, preventive maintenance procedures, and documentation of work performed. Lab required. Prerequisite: HITT 1305. 2 credit hours. (W)

BIOM 2311 General Medical Equipment I

Analysis of selected current paths from a larger schematic. Discussion of equipment and disassembly and reassembly of equipment. Lab required. Prerequisites: CETT 1307, CETT 1425, and HITT 1305. 3 credit hours. (W)

BIOM 2315 Physiological Instruments I

Theory of operation, circuit analysis, and troubleshooting physiological instruments. Lab required. Prerequisites: BIOM 2311 and CETT 1409. 3 credit hours. (W)

BIOM 2319 Fundamentals of X-Ray and Medical Imaging Systems

Radiation theory and safety hazards, fundamental circuits, and application of X-ray systems including circuit analysis and troubleshooting. Additionally, ultra sound systems and magnetic resonance systems. Lab required. Prerequisite: BIOM 2343. 3 credit hours. (W)

BIOM 2331 Biomedical Clinical Instrumentation

A study of theory, application, and principles of operation of instruments commonly used in a medical laboratory. Lab required. Prerequisite: BIOM 2343. 3 credit hours. (W)

BIOM 2337 Respiratory Equipment Maintenance

Principles of operation, theory, and maintenance of respiratory equipment. Lab required. Prerequisite: BIOM 2343. 3 credit hours. (W)

BIOM 2343 General Medical Equipment II

Theory and principles of operation of a variety of basic electro-mechanical equipment with emphasis on repair and service of actual medical equipment. Lab required. Prerequisites: BIOM 2311 and CETT 1409. 3 credit hours. (W)

BITC 1340 Quality Assurance for the Biosciences

Quality assurance principles and applications. Includes quality control and Federal Drug Administration (FDA)

regulations to the biotechnology, biopharmaceutical, and biomedical device industries. Additionally, BITC 1340 Quality Assurance for the Biosciences is a course designed to introduce the student to quality principles as they apply to the biotechnology, biopharmaceutical, and the biomedical device industries. Theories and application of quality assurance and quality control will be presented and several different quality systems will be discussed such as cGMP, ISO9000, Six Sigma and Lean. This class will be focused on quality in the bioscience workplace and therefore will include many applied assignments, which include internet research in current regulations and discussion board participation. Prerequisite/Concurrent enrollment: BIOL 1415 or consent of Associate Dean/Director. 3 credit hours. (W)

BITC 1350 Special Studies and Bioethical Issues of Biotechnology

Current events, skills, attitudes, and behaviors pertinent to biotechnology and relevant to the professional development of the student. Includes exploration of ethical and legal behaviors in the context of the biotechnology industry. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Associate Dean/Director. 3 credit hours. (W)

BITC 2350 Bioinformatics

Current topics in bioinformatics, proteomics, and computational biology. Includes methods for high-throughput data collection, storing, and accessing biological data. Covers programs and algorithms used to analyze data. Prerequisite: BITC 2411 or consent of Associate Dean/Director. 3 credit hours. (W)

BITC 2411 Biotechnology Laboratory Instrumentation

Theory, applications, and safe operation of various biotechnology-related analytical instruments. Addresses separation and identification techniques including electrophoresis, spectrophotometry, and chromatography. Lab required. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Associate Dean/Director. 4 credit hours. (W)

BITC 2431 Cell Culture Techniques

Theory and applications of cell culture techniques. Laboratory emphasis on the principles and practices of applications such as initiation, cultivation, maintenance, and preservation of cell lines. Lab required. Prerequisite: BIOL 1406 or BIOL 1414 or consent of Associate Dean/Director. 4 credit hours. (W)

BITC 2441 Molecular Biology Techniques

In-depth coverage of the theory and laboratory techniques in molecular biology with an emphasis on gene expression and regulation, recombinant DNA, and nucleic acids. Lab required. Prerequisites: BIOL 1414 and

BIOL 1415 or consent of Associate Dean/Director. 4 credit hours. (W)

BITC 2486 Internship - Biology Technician/Biotechnology Laboratory Technician

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Contact the Associate Dean/Director for more information. Prerequisite: Completed 9 hours of biotechnology courses and consent of Associate Dean/Director. Major Requirement: Biotechnology. 4 credit hours. (W)

BMGT 1301 Supervision

The role of the supervisor. Includes managerial functions as applied to leadership, counseling, motivation, and human relations skills. 3 credit hours. (W)

BMGT 1305 Communications in Management

Basic theory and processes of communication skills necessary for the management of an organization's workforce. 3 credit hours. (W)

BMGT 1306 Facilities Management

General management and supervision of public buildings, business and industrial facilities, and other complexes requiring supervision and control. Includes fire alarm maintenance, plant maintenance, occupational safety, OSHA rules and regulations, management of maintenance supervisors, and hazardous materials awareness. Prerequisite: CNBT 2342. 3 credit hours. (W)

BMGT 1307 Team Building

Principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, conflict resolution, and the role of the individual in the team. 3 credit hours. (W)

BMGT 1309 Information and Project Management

Critical path methods for planning and controlling projects. Includes time/cost tradeoffs, resource utilization, stochastic considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision. 3 credit hours. (W)

BMGT 1313 Principles of Purchasing

The purchasing process as it relates to such topics as inventory control, price determination, vendor selection,

supply chain management, negotiation techniques, and ethical issues in purchasing. 3 credit hours. (W)

BMGT 1327 Principles of Management

Concepts, terminology, principles, theories, and issues in the field of management. 3 credit hours. (W)

BMGT 1341 Business Ethics

Discussion of ethical issues, the development of a moral frame of reference, and the need for an awareness of social responsibility in management practices and business activities. Includes ethical corporate responsibility. 3 credit hours. (W)

BMGT 1344 Negotiations and Conflict Management

Theories which aid in the diagnosis of interpersonal and intergroup conflict. The role of manager as negotiator, intermediary, and problem solver. 3 credit hours. (W)

BMGT 2303 Problem Solving and Decision Making

Decision-making and problem-solving processes in organizations utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities using managerial decision tools. 3 credit hours. (W)

BMGT 2309 Leadership

Leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles. 3 credit hours. (W)

BMGT 2311 Change Management

Knowledge, skills, and tools that enable a leader/organization to facilitate change in a participative style. 3 credit hours. (W)

BMGT 2341 Strategic Management

Strategic management process, including analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment. Prerequisite: BMGT 1327. Prerequisite/Concurrent enrollment: BMGT 2311. 3 credit hours. (W)

BMGT 2382 Cooperative Education - Business Administration and Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

BNKG 1303 Principles of Bank Operation

Overview of the fundamental banking functions and the role of regulation in the banking industry. Explanation of financial products and services to various markets. 3 credit hours. (W)

BNKG 1340 Money and Financial Markets

Monetary policy and its related effects on financial intermediaries. Includes financial markets, regulatory functions, and structures. Addresses investment and funds management. 3 credit hours. (W)

BNKG 1345 Consumer Lending

A study of the different types of consumer loans. Identify the federal regulations and state laws pertaining to collection and serving of a consumer loan and relate consumer credit to the lending process. 3 credit hours. (W)

BNKG 1347 Bank Marketing

Principles of marketing as they relate to the banking industry. Special emphasis on deposit, credit, and payment related products. Pricing, promotion, product, and distribution strategies as used within the financial industry are included. 3 credit hours. (W)

BNKG 1349 Commercial Lending

Overview of the commercial lending market and process with emphasis on credit analysis, evaluation, federal regulations, and state laws. 3 credit hours. (W)

BNKG 1356 Analyzing Financial Statements

A study of the process of evaluating financial statements, cash flow, and ratio analysis of individuals and businesses. Emphasis on the relationship of comparative analysis and industry standards. 3 credit hours. (W)

BNKG 2380 Cooperative Education - Banking and Financial Support Services

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact your Workforce Program Career Coach. 3 credit hours. (W)

BUSA 1313 Investments

Theory and mechanics of business investment decisions and management of business financial assets. Topics include time value of money, cash flow, capital budgeting, sources of funds, break-even analysis, and investment decisions. 3 credit hours. (W)

BUSA 1315 Investments and Securities

A study of relevant terminology and changes in the stock

market as a result of economic and political events, and changes in interest rates and taxes. 3 credit hours. (W)

BUSG 1304 Financial Literacy

A study of the financial principles when managing financial affairs. Includes topics such as budgeting, retirement, property ownership, savings, and investment planning. 3 credit hours. (W)

BUSG 1307 Entrepreneurship and Economic Development

Overview of entrepreneurship as an economic development strategy. Includes community support systems for entrepreneurs. 3 credit hours. (W)

BUSG 1371 Business Plan for Funding

How to develop a business plan for a small business start-up or expansion that can be submitted to a financial institution or used for implementation. Emphasis on importance of the plan, components, format, and considerations. 3 credit hours. (W)

BUSG 2309 Small Business Management/Entrepreneurship

Starting, operating, and growing a small business. Includes essential management skills, how to prepare a business plan, accounting, financial needs, staffing, marketing strategies, and legal issues. 3 credit hours. (W)

BUSG 2371 Entrepreneurship Experience

Career-related activities associated with the operation of one's own business. This course will allow the student to identify and implement the necessary knowledge and skills required to be a successful business owner. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

BUSG 2380 Cooperative Education - Business/Commerce, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: INSR 1305 and INSR 1345. 3 credit hours. (W)

BUSI 1301 Business Principles

This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics,

social responsibility, and international business. Emphasized is the dynamic role of business in everyday life. 3 credit hours. (A)

BUSI 1307 Personal Finance

Personal financial issues including financial planning, insurance, budgeting, credit, home ownership, savings and tax problems. 3 credit hours. (A)

BUSI 2301 Business Law

The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context. Prerequisite: High school coursework in U.S. history and government; or equivalent. 3 credit hours. (A)

BUSI 2305 Business Statistics

Descriptive and inferential statistical techniques for business and economic decision-making. Topics include the collection, description, analysis, and summarization of data; probability; discrete and continuous random variables; the binomial and normal distributions; sampling distributions; tests of hypotheses; estimation and confidence intervals; linear regression; and correlation analysis. Statistical software is used to analyze data throughout the course. (BUSI 2305 is included in the Business Field of Study.) Prerequisites: MATH 1324 or MATH 1314, and BCIS 1305. 3 credit hours. (A)

CDEC 1270 Introduction to Teaching ESL

An overview of ESL education. Topics include awareness of cultural diversity, assessment strategies, teaching techniques, instructional activity development and historical / philosophical concepts of ESL education. Lab required. 2 credit hours. (W)

CDEC 1313 Curriculum Resources for Early Childhood Programs

A study of the fundamentals developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age eight. Lab required. 3 credit hours. (W)

CDEC 1317 Child Development Associate Training I

Based on the requirements for the Child Development Associate credential (CDA). Topics include CDA overview, observation skills, and child growth and development. The four functional areas of study are creative, cognitive, physical, and communication. Lab required. 3 credit hours. (W)

CDEC 1319 Child Guidance

An exploration of guidance strategies for promoting pro-social behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences. Lab required. 3 credit hours. (W)

CDEC 1321 The Infant and Toddler

A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, learning environments, materials and activities, and teaching/guidance techniques. Lab required. 3 credit hours. (W)

CDEC 1323 Observation and Assessment

A study of observation skills, assessment techniques, and documentation of children's development. Lab required. 3 credit hours. (W)

CDEC 1358 Creative Arts for Early Childhood

An exploration of principles, methods and materials for teaching music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking for children birth through age eight. Lab required. 3 credit hours. (W)

CDEC 1359 Children with Special Needs

A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues. Lab required. 3 credit hours. (W)

CDEC 1385 Cooperative Education - Child Development

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

CDEC 2166 Practicum - Child Care Provider/Assistant

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (W)

CDEC 2304 Child Abuse and Neglect

Methods used in the identification of physical, emotional, and sexual abuse and neglect with an emphasis on developing skills for working with children and families. Includes methods of referral to public and private

agencies that deal with investigation and treatment. Lab required. 3 credit hours. (W)

CDEC 2307 Math and Science for Early Childhood

Exploration of principles, methods, and materials for teaching children math and science concepts and process skills through discovery and play. Lab required. 3 credit hours. (W)

CDEC 2322 Child Development Associate Training II

A continuation of the study of the requirements for the Child Development Associate credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. Lab required. 3 credit hours. (W)

CDEC 2324 Child Development Associate Training III

Continuation of the requirements for the Child Development Associate credential (CDA). The three functional areas of study include family, program management, and professionalism. Lab required. 3 credit hours. (W)

CDEC 2326 Administration of Programs for Children I

Application of management procedures for early care and education programs. Includes planning, operating, supervising, and evaluating programs. Topics cover philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication. Lab required. 3 credit hours. (W)

CDEC 2328 Administration of Programs for Children II

An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis, technical applications in programs and planning parent education / partnerships. Lab required. 3 credit hours. (W)

CDEC 2336 Administration of Programs for Children III

An advanced study of the skills and techniques in administering early care education programs. Lab required. 3 credit hours. (W)

CDEC 2340 Instructional Techniques for Children with Special Needs

Exploration of development and implementation of

curriculum for children with special needs. Lab required. 3 credit hours. (W)

CDEC 2371 Using Technology in the Classroom

An overview of technology, media and digital information in education. This course includes a review of research on the impact, as well as methodology on effective use, of technology and media on children and teachers in the classroom and in curriculum planning and presentation. Lab required. 3 credit hours. (W)

CETT 1307 Fundamentals of Electronics

Applies concepts of electricity, electronics, and digital fundamentals; supports programs requiring a general knowledge of electronics. Lab required. Prerequisite / Concurrent Enrollment: TECM 1343, or MATH 1316 or higher-level math. 3 credit hours. (W)

CETT 1409 DC-AC Circuits

Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, and capacitive and inductive circuit analysis techniques. Lab required. Prerequisites: CETT 1307 and ENTC 1171; TECM 1343, or MATH 1316 or higher-level math. 4 credit hours. (W)

CETT 1425 Digital Fundamentals

An entry level course in digital electronics to include numbering systems, logic gates, Boolean algebra, and combinational logic. Lab required. 4 credit hours. (W)

CETT 1445 Microprocessor

An introductory course in microprocessor software and hardware: architecture, timing sequence, operation, and programming. Discussion of appropriate software diagnostic language and tools. Lab required. Prerequisites: CETT 1425 and CETT 1307, or consent of Associate Dean/Director. 4 credit hours. (W)

CETT 1457 Linear Integrated Circuits

A study of the characteristics, operations and testing of linear integrated circuits. Applications include instrumentation and active filtering. Lab required. Prerequisite: CETT 1409 or consent of Associate Dean/Director. 4 credit hours. (W)

CETT 2380 Cooperative Education-Computer Engineering Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the

Associate Dean/Director for more information. 3 credit hours. (W)

CETT 2471 Emerging Topics in Engineering Technology

Topics address identified emerging technology developments, skills, knowledge pertinent to the technology or occupation and relevant to the professional development of the student. Lab required. Prerequisites: CETT 1409 and CETT 1425, or consent of Associate Dean/Director. 4 credit hours. (W)

CHEF 1301 Basic Food Preparation

A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W)

CHEF 1302 Principles of Healthy Cuisine

Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Alternative methods and ingredients will be used to achieve a healthier cooking style. Lab required. Prerequisites: CHEF 2331 with a grade of "C" or better and IFWA 1310. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1305 Sanitation and Safety

A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards. 3 credit hours. (W)

CHEF 1310 Garde Manger

A study of cold foods and garnishes. Emphasis on design, techniques, and display of fine foods. Lab required. Prerequisites: CHEF 2331 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. Prerequisite/Concurrent: CHEF 2302. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1314 A La Carte Cooking

A course in a la carte or "cooking to order" concepts. Topics include menu and recipe interpretation and conversion, organization of work station, employment of appropriate cooking methods, plating, and saucing principles. Lab included. Prerequisites: RSTO 1325, CHEF 2302, CHEF 1310, and PSTR 1301 - all with a grade of "C" or better and either CHEF 1341 or CHEF 1345. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1341 American Regional Cuisine

A study of the development of regional cuisines in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and acquire knowledge of recipe strategies and production systems. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: CHEF 1305 with a grade of "C" or better. Prerequisite/Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1345 International Cuisine

The study of classical cooking skills associated with the preparation and service of international and ethnic cuisine's. Topics include similarities between food production systems used in the United States and other regions of the world. Professional chef uniform and kitchen tools required. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1364 Practicum (or Field Experience) - Culinary Arts/Chef Training

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: CHEF 2331. 3 credit hours. (W)

CHEF 2302 Saucier

Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Lab included. Prerequisite: CHEF 1301 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 2331 Advanced Food Preparation

Advanced concepts of food preparation and presentation techniques. Identify and prepare breakfast meats, eggs, cereals, and batter products, discuss the applicability of convenience, value added, further processed or par cooked food items; and demonstrate food presentation techniques and writing standardized recipes. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: CHEF 1301 with a grade of "C" or better. 3

credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 2336 Charcuterie

Advanced concepts in the construction of sausages, pates, and related force meat preparations. Lab required
Prerequisites: CHEF 1301, CHEF 1305 and CHEF 2331.
3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 2380 Cooperative Education - Culinary Arts/Chef Training

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1301, CHEF 2331, and CHEF 1305 - all with a grade of "C" or better. 3 credit hours. (W)

CHEM 1306 Introductory Chemistry: General, Organic and Biological

Survey course introducing general, organic, and biological chemistry. Topics will include scientific calculations, chemical equations, atomic and molecular structure, states of matter, nuclear chemistry, elementary thermodynamics, acid-base chemistry, organic functional groups, and biomolecules. Designed for non-science and allied health students. Satisfies the chemistry requirement for Collin College's RN-to-BSN Program. Prerequisite: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

CHEM 1405 Introduction to Chemistry I

For non-science majors. Survey of chemistry including scientific calculations, chemical equations, theory of atoms and bonding, states of matter, nuclear chemistry, elementary thermodynamics, and acid-base chemistry. Lab and recitation required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

CHEM 1409 General Chemistry for Engineering Majors

Lecture: Fundamental principles of chemistry for engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, acid-base concepts, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, phase-

diagrams, chemical thermodynamics, kinetics, introduction to chemical equilibrium, and an introduction to descriptive inorganic chemistry and organic chemistry. Lab: Basic laboratory experiments supporting theoretical principles presented in lecture; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports. This is a co-requisite for CHEM 1409 lecture. Lab required. Prerequisite: MATH 1314 equivalent or higher level within the last 5 years with a grade of "C" or better. 4 credit hours. (A)

CHEM 1411 General Chemistry I

Lecture: Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Lab: Basic laboratory experiments supporting theoretical principles presented in CHEM 1311; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. High school chemistry is strongly recommended. Prerequisite: MATH 1314 equivalent or higher level within the last 5 years with a grade of "C" or better, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

CHEM 1412 General Chemistry II

Lecture: Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Lab: Basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports. Prerequisite: CHEM 1411 within the last five years with a grade of "C" or better. 4 credit hours. (A)

CHEM 2389 Academic Co-op Chemistry

Integrates on-campus study with practical hands-on work experience in chemistry. In conjunction with class seminars, the student will set specific goals and objectives in the study of chemistry. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

CHEM 2423 Organic Chemistry I

Lecture: Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms.

Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. Lab: Laboratory activities will reinforce fundamental principles of organic chemistry, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Methods for the purification and identification of organic compounds will be examined. Lab and recitation required. Prerequisite: CHEM 1412 within the last five years with a grade of "C" or better. 4 credit hours. (A)

CHEM 2425 Organic Chemistry II

Lecture: Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. Lab: Laboratory activities reinforce advanced principles of organic chemistry, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Lab and recitation required. Prerequisite: CHEM 2423 within the last 5 years with a grade of "C" or better. 4 credit hours. (A)

CHIN 1411 Beginning Chinese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Chinese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

CHIN 1412 Beginning Chinese II

Continuation of CHIN 1411. Lab required. Prerequisite: CHIN 1411 or consent of Associate Dean/Director. 4 credit hours. (A)

CHIN 2311 Intermediate Chinese I

Review and application of skills in listening

comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: CHIN 1412 or consent of Associate Dean/Director. 3 credit hours. (A)

CHIN 2312 Intermediate Chinese II

Continuation of CHIN 2311, emphasizing conversation and reading skills. Prerequisite: CHIN 2311 or consent of Associate Dean/Director. 3 credit hours. (A)

CMGT 3305 Construction Estimating II

This course introduces students to the skills and tools necessary to prepare formal bids for construction projects. It focuses on pricing, indirect costs, bid analysis and use of computer aided software. The goal of this course is to expand skills in new topics of estimating and to assist students in developing high confidence in the application of the estimating skills learned previously. The course addresses the bidding procedure from receipt of bid documents through work breakdown, work quantification, pricing and bid submittal for lump sum and unit price bids, and preparation of design/build proposals. Lab required. Prerequisite: CNBT 1346. 3 credit hours.

CMGT 3310 Building Information Modeling for Constructors

This course focuses on the skills and information needed to effectively use an existing Building Information Model (BIM) in plan execution for a building construction project. This is a project-based course where students gain knowledge on the implementation of BIM based schedules, and estimates. Lab required. Prerequisites: CNBT 2310 and CNBT 2340. 3 credit hours.

CMGT 3315 Construction Structural Systems

This course presents the various structural systems used in the construction of buildings. Building types vary from single-family houses to high-rise buildings to multi-use facilities. Case studies are examined from a structural viewpoint, in which the rationale for the structural system is analyzed, and then a systematic construction process is followed from start to completion of the project. Lab required. Prerequisites: CNBT 2310 and CNBT 2340. 3 credit hours.

CMGT 3320 Construction Project Planning

Development of parameter cost estimates for activities that relate to the construction of a building project; work packages sequenced, planned and leveled to develop a working project execution document; development of procedures to monitor actual field progress. Lab required. Prerequisite: CNBT 2344. 3 credit hours.

CMGT 4305 Construction Materials and Testing and Inspections

Construction materials testing and inspection procedures

in laboratory and field situations using standard testing equipment, methods, and field inspection techniques per ASTM and ACI standards. Laboratory reports, computer analysis, data collection and simulated field inspections are included. Focus is placed on acceptance testing for construction materials. Lab required. Prerequisite: CMGT 3315. 3 credit hours.

CMGT 4310 Construction Soils and Foundations

The course gives an overview of the difference and correlation between soil mechanics and foundations engineering. Soil mechanics is the branch of engineering that involves the study of the properties of soils and their behaviors under stress and strain in idealized conditions. Foundation engineering is the application of the principles of soil mechanics in the planning, design and construction of foundations for buildings, highways, dams and so forth. This course presents a detailed look into soil properties and foundations design. Lab required. Prerequisites: CMGT 3305 and CMGT 3320. 3 credit hours.

CMGT 4315 Construction Project Management

This course explores major problems, tasks and techniques required to manage the technical program in each phase of the product life cycle. Organizational planning, decision-making, and internal external interface techniques for each phase of the project life cycle are addressed. Additional concepts such as: Earned Value Analysis (EVA), Critical Path Management (CPM), Project Requirements Analysis, and Schedule Task Analysis will be explored in depth. Lab required. Prerequisite: CNBT 2344. 3 credit hours.

CMGT 4320 Construction Law and Ethics

This course introduces students to basic understanding of contractual issues that are significant to construction managers. The course is designed to teach basic concepts of contract law and to recognize legal issues making decisions based on current industrial standards. The course also focuses on addressing ethics in the construction industry. Lab required. Prerequisites: CMGT 4315 and PHIL 2306. 3 credit hours.

CMGT 4325 Construction Leadership

Development of competencies in various leadership and management practices that are useful in an array of situations; emphasis on organizational leadership and management development with specific attention to intragroup relationships and techniques for achieving group goals. Lab required. Prerequisite: CMGT 4315. 3 credit hours.

CMGT 4330 Construction Management Capstone

Capstone projects course emphasizing a team approach to the analysis and solutions of Construction problems. Projects will be supplied by industry whenever possible.

Emphasizes scheduling, design, working in teams. A final written report drawings and presentations will be provided to the customer. Lab required. Prerequisites: CMGT 4315, CMGT 4305, and CMGT 4310. 3 credit hours.

CNBT 1280 Cooperative Education - Construction Engineering Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director of the program for further information. Prerequisite: Program permit approval required. 2 credit hours. (W)

CNBT 1300 Residential and Light Commercial Construction Drawings

Introduction to construction drawings with a focus on residential and light commercial construction. Additionally, this course will include an introduction to computerized prints and related software. Lab required. 3 credit hours. (W)

CNBT 1311 Construction Materials and Methods I

Introduction to construction materials and methods and their applications. Lab required. 3 credit hours. (W)

CNBT 1315 Field Engineering I

Surveying equipment, sketches, proper field note taking, methods of staking, layout of building site, and horizontal and vertical controls. Lab required. Prerequisite: CNBT 1300 and OSHT 1305. 3 credit hours. (W)

CNBT 1318 Construction Tools and Techniques

Comprehensive study of the selection and use of hand tools, portable power and stationary power tools and related construction equipment. Lab required. 3 credit hours. (W)

CNBT 1342 Building Codes and Inspections

Building codes and standards applicable to building construction and inspection processes. Prerequisite: Departmental Permit. 3 credit hours. (W)

CNBT 1346 Construction Estimating I

Fundamentals of estimating materials and labor costs in construction. Lab required. Prerequisites: CNBT 1300 and CNBT 2304. 3 credit hours. (W)

CNBT 1359 Project Scheduling

A study of conventional scheduling using critical-path-method; precedence and arrow networks; bar charts; monthly reports; and fast track scheduling. Additionally, scheduling software for the construction industry will be

used. Lab required. Prerequisites: CNBT 1300 and CNBT 2304. 3 credit hours. (W)

CNBT 1380 Cooperative Education - Construction Engineering Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

CNBT 2304 Construction Methods and Materials II

Continuation of the study of the properties of building materials, methods and equipment for their integrated use in completing construction projects. Additionally, the course will address quality control in construction. Lab required. Prerequisites: CNBT 1311 and OSHT 1305. 3 credit hours. (W)

CNBT 2310 Commercial/Industrial Blueprint Reading

Blueprint reading for commercial/industrial construction. Lab required. Prerequisite: CNBT 1300. 3 credit hours. (W)

CNBT 2340 Mechanical, Plumbing & Electrical Systems in Construction II (Commercial)

Processes and methods used in design, selection of equipment, and installation of mechanical, plumbing, and electrical systems in commercial buildings. Includes heating and cooling systems, duct work, mechanical and electrical control systems, lighting requirements, and design of water supply and sanitary sewer systems. Additionally, the course addresses MEP blueprints, schedule coordination, and safety. Lab required. Prerequisites: CNBT 1300 and CNBT 1311. 3 credit hours. (W)

CNBT 2342 Construction Management I

Management skills on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making. Additionally, this course includes customer and contractor relations and ethics in the construction industry. 3 credit hours. (W)

CNBT 2344 Construction Management II

A management course in contract documents, safety, planning, scheduling, production control, law and labor issues. Topics include contracts, planning, cost and production peripheral documents, and cost and work analysis. Additional topics include customer service and

quality control. Prerequisites: CNBT 1342, and CNBT 1346. 3 credit hours. (W)

CNBT 2346 Construction Management III

Advanced course work in safety procedures, project management, scheduling, material handling, layout, payment scheduling, and inspection. Additionally, this is a capstone course in which program learning outcomes will be demonstrated. Prerequisites: CNBT 2344 or consent of Associate Dean/Director. 3 credit hours. (W)

CNBT 2380 Cooperative Education - Construction Engineering Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

COMM 1307 Introduction to Mass Communication

Survey of basic content and structural elements of mass media and their functions and influences on society. Additionally, a study of mass media in the United States with emphasis on newspapers, magazines, radio, film, publishing, the internet and television; history of mass media and the business models that support them; and the role and responsibility of mass media in modern society. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 1335 Introduction to Electronic Media

An overview of the development, regulation, economics, social impact, and industry practices in electronic media. Additionally, an historical and critical comparison of the first two broadcast media as they have evolved, this course includes discussion of important historical issues that resonate with contemporary media concerns - including intellectual property and patent rights, aesthetics and production values, censorship and freedom of speech, broadcast ethics, ratings fallibility, public responsibility and emotional contagion. The course also discusses the development and necessary metamorphosis of each medium in response to contemporary events, social change, and the encroachment of new technology, new media and alternative delivery methods. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2300 Media Literacy

Criticism and analysis of the function, role, and responsibility of the mass media in modern society from the consumer perspective. Includes the ethical problems and issues facing each media format, with the effect of political, economic, and cultural factors on the operation

of the media. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2330 Introduction to Public Relations

Exploration of the history and development of public relations. Presentation of the theory behind and process of public relations, including the planning, implementation, and evaluation of PR campaigns. Additionally, exploration of current trends in the profession and overview of how the process is carried out in different public relations specializations. The student is recommended to complete either COMM 1307 or SPCH 1311 prior to registering for this course, but not required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2331 Radio / Television Announcing

Principles of, and practice in, radio and TV announcing, including the study of voice (diction, pronunciation, and delivery) as it relates to mediated contexts and experience in news announcing, interviewing, and acting in commercial. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2332 Radio/Television News

The preparation and analysis of news styles for the electronic media. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2339 Writing for Radio, Television, and Film

Designed to train the student in all typical forms of broadcast and film writing, including news, commercial copy, critique and commentary, radio theatre, comedy and dramatic teleplay, and screenplay. Course provides both writing and production experiences. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2366 Film Appreciation

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Lab required. Prerequisite: ARTS 2348 or PHTC 1311 or consent of Associate Dean/Director. 3 credit hours. (A)
Note: Students may take either DRAM 2366 or COMM 2366, but not both.

COMM 2389 Academic Co-op Communication

For students with interest or major in mass communications, radio, TV, or film. Integrates on-campus study with practical hands-on work experience in communication. In conjunction with class seminars, the student will set specific goals and objectives in the study of communication. Contact the Associate Dean/Director

for more information. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COSC 1301 Introduction to Computing

Overview of computer systems - hardware, operating systems, the Internet and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COSC 1315 Introduction to Computer Programming

Introduction to computer programming for solving a variety of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. Lab required. 3 credit hours. (A)

COSC 1420 C Programming

Introduces the fundamental concepts of structured programming in the C language. Topics include data types; control structures; functions, structures, arrays, pointers, pointer arithmetic, unions, and files; the mechanics of running, testing, and debugging programs; introduction to programming; and introduction to the historical and social context of computing. Additionally, this course assumes computer literacy. Prerequisite: MATH 1314 or equivalent academic preparation. 4 credit hours. (A)

COSC 1436 Programming Fundamentals I

This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 4 credit hours. (A)

COSC 1437 Programming Fundamentals II

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The

course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.). Prerequisite: COSC 1436, COSC 1420, or consent of Associate Dean/Director. 4 credit hours. (A)

COSC 2325 Computer Organization

The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. Additionally, this class is taught with Intel assembly language. Prerequisites: COSC 1436 or consent of Associate Dean/Director. 3 credit hours. (A)

COSC 2436 Programming Fundamentals III

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object-oriented language. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1437 or consent of Associate Dean/Director. 4 credit hours. (A)

CPMT 1305 IT Essentials I: PC Hardware and Software

Provides comprehensive overview of computer hardware and software and an introduction to advanced concepts addressed by CISCO certification. Lab required. 3 credit hours. (W)

CRIJ 1301 Introduction to Criminal Justice

This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. 3 credit hours. (A)

CRIJ 1306 Court Systems and Practices

This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law. 3 credit hours. (A)

CRIJ 1307 Crime in America

American crime problems in historical perspective, social and public policy factors affecting crime, impact and

crime trends, social characteristics of specific crimes, and prevention of crime. 3 credit hours. (A)

CRIJ 1310 Fundamentals of Criminal Law

This course is the study of criminal law including application of definitions, statutory elements, defenses and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability. 3 credit hours. (A)

CRIJ 1313 Juvenile Justice System

A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. 3 credit hours. (A)

CRIJ 2313 Correctional Systems and Practices

This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. 3 credit hours. (A)

CRIJ 2314 Criminal Investigation

Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. 3 credit hours. (A)

CRIJ 2323 Legal Aspects of Law Enforcement

Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; and police liability. 3 credit hours. (A)

CRIJ 2328 Police Systems and Practices

This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority. 3 credit hours. (A)

CRPT 1311 Roof Systems

Principles of design and construction of a roof system incorporating gable, hip, valley and intersections. Emphasis given to safe work practices and the use and maintenance of tools and equipment. Lab required. Prerequisite/Concurrent Enrollment: CNBT 1318. 3 credit hours. (W)

CRPT 1315 Wall Systems

Identification of components; construction of wall systems; safe work practices; and the use and maintenance of tools and equipment. Lab required.

Prerequisite/Concurrent Enrollment: CNBT 1318. 3 credit hours. (W)

CRPT 1323 Floor Systems

An introduction to common floor systems. Includes component identification; construction of a floor system; safe work practices; and the use and maintenance of tools and equipment. Lab required. Prerequisite/Concurrent Enrollment: CNBT 1318. 3 credit hours. (W)

CRPT 1325 Forms and Foundations I

Construction of basic form and foundation systems including related safety, tools, equipment, and building layout. Emphasis on safe work practices and the use and maintenance of tools and equipment. Lab required. Prerequisite/Concurrent Enrollment: CNBT 1318. 3 credit hours. (W)

CRPT 1341 Exterior Finish Systems

Installation of exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis on safe work practices and the use and maintenance of tools and equipment. Lab required. Prerequisite/Concurrent Enrollment: CRPT 1311 and CRPT 1325. 3 credit hours. (W)

CRPT 1345 Interior Finish Systems

Installation of interior finish systems and components including the placement and installation of doors, trim, floor, wall, and ceiling finishes. Emphasis on safe work practices and use and maintenance of tools and equipment. Lab required. Prerequisites: CNBT 1315 and CRPT 1323. 3 credit hours. (W)

CRPT 1371 Advanced Carpentry Techniques

A study of the physical construction skills used to build vertical, horizontal, and precast tilt-up concrete units and systems, as well as the personal leadership skills of the effective crew leader who manages the project controls and safety. Lab required. Prerequisites: CRPT 1311, CRPT 1315, CRPT 1323, and CRPT 1325. 3 credit hours. (W)

CSFA 1172 Pharmacology and Anesthesia

Pharmacology and Anesthesia will provide the surgical assisting student with the fundamentals of basic pharmacology and clinical pharmacology related to the surgical patient. The course will also examine the basics of anesthesia methods and agents and the association with various surgical situations. Lab required. 1 credit hour. (W)

CSFA 1173 Principles of Surgical Assisting Lab I

A lab course that teaches fundamental skills: Placement of monitoring devices, review of bladder catheterization, surgical positioning, application of tourniquets, prepping

and draping, operative instrumentation, visualization techniques, hemostasis, suturing and knot tying techniques, dressings and drainage systems, post-operative pain control methods, and the use of special equipment. Lab required. 1 credit hour. (W)

CSFA 1175 Perioperative Microbiology and Bioscience

Course covers three main components: fundamental concepts in microbiology and infection, major clinical syndromes corresponding to the clinical specialties, and additional information on bacteriology, virology, parasitology, mycology, and entomology, including related laboratory tests and antibiotics. Emphasis on surgical events related to wound healing and the integrity of the surgical wound. Also covered are different diagnostic tests and the relationship between those tests and the management of the surgical patient. In addition, issues surrounding the care and handling of surgical specimens, management of the critically ill patient, thermoregulatory devices, fluid balances and related issues and, finally, skin assessment are discussed in detail. Lab required. 1 credit hour. (W)

CSFA 1176 Complications in Surgery

Surgical complications, including hemorrhage, perforation of viscus or cavity, contamination, exposure, retraction, compression injuries, cardiac events, sudden hypoxia, sudden shock, interruption of surgical supervision, critical equipment failure and corrective measures are discussed, in addition to how to initiate the appropriate course of action to address these situations. 1 credit hour. (W)

CSFA 1371 Fundamentals and Surgical Safety

Fundamentals and Surgical Safety will provide the surgical assisting student with basic fundamentals and the surgical assistant's role in the proper and safe positioning of the surgical patient, use of pneumatic devices, drapes and draping, proper skin preparation, instrumentation, exposure and visualization techniques, post-operative pain control, patient transport, and provide instruction of surgical monitoring devices. Fundamentals and Surgical Safety will also provide the surgical assisting student with information and appreciation of the importance of safety in the surgical setting. Lab required. 3 credit hours. (W)

CSFA 2171 Role Definition, Ethical, Legal, and Moral Responsibilities

Course addresses factors that will result in positive team relationships, the practice of professional ethics, and the parameters of one's specific role, including the identification of certain possible crises and problem areas, with an understanding as to how the Surgical Assistant should deal with each given situation. Different legal definitions and terminology are covered, and how to understand and identify Operating Room situations that could lead to ethical conflict. Students also gain an

understanding of appropriate (and legal) decision-making, as well as what establishes negligence, basic patient and caregiver rights, Operating Room incidents that could result in litigation, and problems peculiar to the Surgical Assistant's role. 1 credit hour. (W)

CSFA 2173 Principles of Surgical Assisting Lab II

A lab course continuation that teaches fundamental skills: Placement of monitoring devices, review of bladder catheterization, surgical positioning, application of tourniquets, prepping and draping, operative instrumentation, visualization techniques, hemostasis, suturing and knot tying techniques, dressings and drainage systems, post-operative pain control methods, and the use of special equipment. Lab required. 1 credit hour. (W)

CSFA 2371 Surgical Procedures

Surgical Procedures will provide the surgical assisting student with an in-depth procedural analysis of most major surgeries performed in the operating room; delivering step-by-step surgical, anatomical, and physiological instruction in preparation for their clinical externship. Lab required. 3 credit hours. (W)

CSFA 2372 Operative Anatomy and Pathophysiology I

A systematic investigation of the structure and organization of the human body and the mechanism and manifestation of different human diseases. The basic science of pathology is concerned with the etiology and pathogenesis of disease. Essential information is provided for understanding the diagnosis of disease in the clinical setting. When studying anatomy, the emphasis must be based on regional anatomy with surgical anatomy as the critical component, as opposed to the entry-level approach of systemic anatomy. Surgical anatomy is the critical factor with an emphasis on advanced anatomical knowledge that is applied towards the surgical diagnosis and procedure. This course will thoroughly examine several major surgical specialties: General, Plastics, Obstetrics and Gynecology, Ortho/Joints, Colorectal, Robotics, and Cardio/Thoracic/Vascular. This course has been specifically prepared for the surgical assisting Advanced Technical Certificate program. Lab required. 3 credit hours. (W)

CSFA 2373 Operative Anatomy and Pathophysiology II

A continuation of the investigation of the structure and organization of the human body and the mechanism and manifestation of different human diseases. The basic science of pathology is concerned with the etiology and pathogenesis of disease. Essential information is provided for understanding the diagnosis of disease in the clinical setting. When studying anatomy, the emphasis must be based on regional anatomy with surgical anatomy as the

critical component, as opposed to the entry-level approach of systemic anatomy. Surgical anatomy is the critical factor with an emphasis on advanced anatomical knowledge that is applied towards the surgical diagnosis and procedure. This course will thoroughly examine several major surgical specialties: General, Plastics, Obstetrics and Gynecology, Ortho/Joints, Colorectal, Robotics, and Cardio/Thoracic/Vascular. This course has been specifically prepared for the surgical assisting Advanced Technical Certificate program. Lab required. 3 credit hours. (W)

CSFA 2472 Suturing, Knot Tying, Hemostasis, and Wound Healing

Suturing, Knot Tying, Hemostasis, and Wound Healing is a comprehensive lab course designed to provide instruction of and participation in the various suturing and tying techniques including simple and complex stitches, interrupted and running stitches, two-handed, one-handed, and instrument knot tying techniques. The course will provide the surgical assisting student with the detailed principles of wound healing, the interaction of a complex cascade of cellular events that generates resurfacing, reconstitution, and restoration of the tensile strength of the surgical wound. The course will also provide an in-depth and interactive discussion of hemostatic methods: chemical/topical agents, sutures and ties, direct pressure, and physical agents. Lab required. 4 credit hours. (W)

CSFA 2473 Surgical Assisting Clinical I

Surgical Assisting Clinical I is intended to provide training and clinical practice in basic surgical skills applicable to the surgical assisting student. A student enrolled in the course is assigned to qualified preceptors - surgeons who provide direct supervision and guidance during the clinical rotation. Each student in the course is required to complete 140 cases with 100 percent skill competency. To fulfill the role of the surgical assistant, the student must perform with proficiency in a minimum of 20 General Surgery cases with the remaining cases divided between two or more specialty areas, also with a minimum of 20 cases in each. 4 credit hours. (W)

CSFA 2474 Surgical Assisting Clinical II

Surgical Assisting Clinical II is intended to provide training and clinical practice in basic surgical skills applicable to the surgical assisting student. A student enrolled in the course is assigned to qualified preceptors - surgeons who provide direct supervision and guidance during the clinical rotation. Each student in the course is required to complete 140 cases with 100 percent skill competency. To fulfill the role of the surgical assistant, the student must perform with proficiency in a minimum of 20 General Surgery cases with the remaining cases

divided between two or more specialty areas, also with a minimum of 20 cases in each. 4 credit hours. (W)

CYBR 3310 Introduction to Cryptography

This course introduces the inner workings of cryptographic primitives and how to correctly use them. Specifically, the course covers cryptographic algorithms, protocols and techniques. The algorithms illustrate the art of encryption and secure hashing. The cryptographic protocols will expose the students to the world of building trust in an untrusted environment. Cryptographic techniques used in key management and algorithm choice will be explored. Lab required. Prerequisites: ITSY 2341 and Mathematics core complete. 3 credit hours.

CYBR 3320 Digital and Device Forensics

This course will help students understand the issues, techniques, and vulnerabilities of small scale (non-PC) digital device forensics. Emphasis will be placed on the forensically sound acquisition, preservation, analysis and presentation of small scale digital devices as evidence. Lab required. Prerequisite: ITSY 2343. 3 credit hours.

CYBR 3330 Advanced Network Topologies and Protocols

This course examines the advanced and novel areas of networks and protocols. Various networks will be examined with secure configurations, analysis, and response to threats. Lab required. Prerequisite: ITSY 2343. 3 credit hours.

CYBR 3340 Cyber Crime

An examination of Cyber Crimes and other abuses arising in a cyber environment. Traditional and contemporary forms of cybercrime will be explored, including hacking, insider threat, cyberbullying, hacktivism, cyberterrorism and others. Students will learn how computers can be either the target or the tool for committing cybercrimes. In addition, sociological and psychological aspects associated with cybercrime will be examined. Lab required. Prerequisite: ITSY 2341. 3 credit hours.

CYBR 3350 Cyber Privacy

This course examines the diverse components of privacy and the effects the Internet has on privacy. Approaches for individual, organization, and government privacy as well as privacy laws will be examined. Lab required. Prerequisite: CYBR 3320. 3 credit hours.

CYBR 3360 Mobile Technologies

This course examines how mobile systems function to allow secure voice and data access. Lab required. Prerequisite: CYBR 3330. 3 credit hours.

CYBR 4310 Penetration Testing

This course provides students with methods of discovering ways of exploiting vulnerabilities to gain

access to a system. Students will learn the methods, techniques, and tools to test the security of computer networks, infrastructure and applications. Lab required. Prerequisite: CYBR 3340. 3 credit hours.

CYBR 4320 Cyber Defense Operations

An examination of the concepts used in defending a network, and the basic tools and techniques that can be used to protect a network and communication assets from cyber threats. Lab required. Prerequisite: CYBR 4310. 3 credit hours.

CYBR 4330 Virtualization and Cloud Security

An examination of how modern host virtualization is implemented, deployed, and used. Students will understand the interfaces between major components of virtualized systems, and the implications these interfaces have for security. Students will examine the technologies and services that enable cloud computing, different types of cloud computing models and the security and legal issues associated with cloud computing. Lab required. Prerequisites: CYBR 3320 and CYBR 3340. 3 credit hours.

CYBR 4340 Information Assurance

A study of common security architectures for the protection of information systems and data. An examination of the common standards related to information assurance. Application of architectures and standards within the rules, regulations for compliance. Lab required. Prerequisite: ITSY 2342 or ITSY 2330. 3 credit hours.

CYBR 4350 Senior Project

This course is designed to integrate all previous coursework. Under the guidance of the professor, each student completes a practical exercise in a cybersecurity role. Lab required. Prerequisites: CYBR 4320 and CYBR 4330. 3 credit hours.

DANC 1110 Tap Dance

Instruction in the fundamental techniques and concepts associated with Tap dance. May be repeated one time for additional degree credit. Lab required. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1128, DANC 1151, DANC 2151 for a combined total of no more than 18 credit hours.

DANC 1112 Dance Practicum

Practicum in dance related topics with emphasis on practical skills necessary for the field. May be repeated for credit once. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (A)

DANC 1128 Ballroom and Social Dance

Introductory instruction in the fundamental techniques and concepts associated with Ballroom and Social Dance.

May be repeated one time for additional degree credit. Lab required. 1 credit hour. (A)

Note: Students may take DANC 1110, DANC 1128, DANC 1151, and DANC 2151 for a combined total of no more than 18 credit hours.

DANC 1151 Freshman Dance Performance

Instruction in dance performance through experiential projects at the freshman level. May be repeated one time for additional degree credit. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take DANC 1110, DANC 1128, DANC 1151, and DANC 2151 for a combined total of no more than 18 credit hours.

DANC 1201 Dance Composition - Improvisation

This introductory course in improvisation will investigate spontaneous problem solving as a means of generating movement for dance composition. Students will be called upon to explore and respond to various forms of stimuli in a safe and supportive learning environment within solo and group work. Lab required. 2 credit hours. (A)

DANC 1241 Beginning Ballet

Instruction in the fundamental techniques and concepts associated with ballet. May be repeated one time for additional degree credit. Lab required. 2 credit hours. (A)

Note: May be repeated one time for additional credit.

DANC 1245 Beginning Modern Dance

Instruction in the fundamental techniques and concepts associated with the concert form of modern dance. May be repeated one time for additional degree credit. Lab required. 2 credit hours. (A)

Note: May be repeated one time for additional credit.

DANC 1247 Beginning Jazz Dance

Instruction in the fundamental techniques and concepts associated with jazz dance. May be repeated one time for additional degree credit. Lab required. 2 credit hours. (A)

Note: May be repeated one time for additional credit.

DANC 1301 Dance Composition - Choreography

This course is an examination of the principles of movement generation, phrasing, choreographic structure, and manipulation. Integration of choreographic principles will foster the growth of personal artistic style. Lab required. Prerequisite: DANC 1201. 3 credit hours. (A)

DANC 1305 World Dance

A survey of dances from different cultures, their histories, and their influences on contemporary dance and society. Cultural origins, significance, motivations and techniques will be explored experientially. 3 credit hours. (A)

DANC 2151 Sophomore Dance Performance

Instruction in dance performance through experiential

projects at the sophomore level. May be repeated for credit once. Lab required. Prerequisite: DANC 1151, Audition. 1 credit hour. (A)

DANC 2241 Intermediate Ballet

Instruction in the intermediate techniques and concepts associated with ballet. May be repeated one time for additional degree credit. Lab required. Prerequisite: DANC 1241 or consent of Associate Dean/Director. 2 credit hours. (A)

Note: May be repeated one time for additional credit.

DANC 2245 Intermediate Modern Dance

Instruction in the intermediate techniques and concepts associated with the concert form of modern dance. May be repeated one time for additional degree credit. Lab required. Prerequisite: DANC 1245 or consent of Associate Dean/Director. 2 credit hours. (A)

Note: May be repeated one time for additional credit.

DANC 2247 Intermediate Jazz Dance

Instruction in the intermediate techniques and concepts associated with jazz dance. May be repeated one time for additional degree credit. Lab required. Prerequisite: DANC 1247 or consent of Associate Dean/Director. 2 credit hours. (A)

Note: May be repeated one time for additional credit.

DANC 2303 Dance Appreciation

A general survey of dance forms designed to create an appreciation of the vocabulary, techniques, and purposes of the creative process. This course includes critical interpretation and evaluations of choreographic works and dance forms within cultural and historical contexts. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

DANC 2389 Academic Co-op Dance

Integrates on-campus study with practical hands-on work experience in dance. In conjunction with class seminars, the student will set specific goals and objectives in the study of dance. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

DFTG 1302 Introduction to Technical Animation and Rendering

Basic study of technical computer models and animation. Lab required. 3 credit hours. (W)

DFTG 1309 Basic Computer-Aided Drafting

An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers,

coordinating systems; and plot/print to scale. Lab required. 3 credit hours. (W)

DFTG 1315 Architectural Blueprint Reading

The fundamentals of blueprint reading for the construction industry. Lab required. 3 credit hours. (W)

DFTG 1317 Architectural Drafting-Residential

Architectural drafting procedures, practices, terms, and symbols. Preparation of detailed working drawings for residential structures. Emphasis on light frame construction methods. Lab required. Prerequisite: DFTG 2328. 3 credit hours. (W)

DFTG 1330 Civil Drafting I

Preparation of civil drawings including drafting methods and principles used in civil engineering. Lab required. Prerequisite: DFTG 1317. 3 credit hours. (W)

DFTG 1333 Mechanical Drafting

Study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings. Lab required. Prerequisite: DFTG 2319. 3 credit hours. (W)

DFTG 1372 SOLIDWORKS Essentials

A study of mechanical drafting and design using SOLIDWORKS mechanical design automation software to build parametric models of parts and assemblies. The course teaches how to make drawings of those parts and assemblies through the use of dimensioning and tolerancing, sectioning techniques and orthographic projection. Lab required. 3 credit hours. (W)

DFTG 2319 Intermediate Computer-Aided Drafting

A continuation of practices and techniques used in basic computer-aided drafting including the development and use of prototype drawings, construction of pictorial drawings, extracting data and basics of 3D. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

DFTG 2328 Architectural Drafting-Commercial

Architectural drafting procedures, practices, governing codes, terms and symbols, including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Lab required. Prerequisite/Concurrent Enrollment: DFTG 1309. 3 credit hours. (W)

DFTG 2332 Advanced Computer-Aided Drafting

Application of advanced CAD techniques. Lab required. Prerequisite/Concurrent Enrollment: DFTG 1372. 3 credit hours. (W)

DFTG 2338 Final Project - Advanced Drafting

A drafting course in which students participate in a comprehensive project from conception to conclusion.

Lab required. Prerequisites: DFTG 1317, DFTG 1333, and DFTG 2350. 3 credit hours. (W)

DFTG 2350 Geometric Dimensioning and Tolerancing

Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)

DFTG 2373 Advanced SOLIDWORKS

Study of advanced topics in SOLIDWORKS mechanical drafting and design. The course teaches how to build assemblies, to create professional drawing, and to use various SOLIDWORKS tools to manage information to facilitate the design process. Lab required. Prerequisite: DFTG 1372. 3 credit hours. (W)

DFTG 2381 Cooperative Education-Drafting and Design Technology/Technician, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

DHYG 1201 Orofacial Anatomy, Histology and Embryology

The histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. Lab required.

Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1207 General and Dental Nutrition

General nutrition and nutritional biochemistry emphasizing the effect nutrition has on oral health. Prerequisite: DHYG 1431 with a grade of C or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1211 Periodontology

Normal and diseased periodontium including the structural, functional, and environmental factors.

Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics.

Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1215 Community Dentistry

The principles and concepts of community public health and dental health education emphasizing community

assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. Lab required. Prerequisites: DHYG 1227, DHYG 1261 and ENGL 1301; all with a grade of C or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1219 Dental Materials

Physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry. Lab required. Prerequisite: DHYG 1431 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1227 Preventive Dental Hygiene Care

The role of the dental hygienist as a therapeutic oral health care provider with emphasis on concepts of disease management, health promotion, communication, and behavior modification. Lab required. Prerequisites: DHYG 1201 and DHYG 1431, both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1235 Pharmacology for the Dental Hygienist

Classification of drugs and their uses, actions, interactions, side effects, contraindications with emphasis on dental applications. Prerequisite: DHYG 1431 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1239 General and Oral Pathology

Disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures. Lab required. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1261 Clinical I-Dental Hygienist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: DHYG 1201 and DHYG 1431; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1304 Dental Radiology

Fundamentals of oral radiography, including techniques, interpretation, quality assurance, and ethics. Lab required. Major Requirement: AAS - Dental Hygiene. Corequisite: DHYG 1201. 3 credit hours. (W)

DHYG 1431 Preclinical Dental Hygiene

Foundational knowledge for performing clinical skills and management of medical emergencies for patients with

emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of C or better. Major Requirement: AAS - Dental Hygiene. 4 credit hours. (W)

DHYG 2102 Applied Community Dentistry

Application of the principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. Lab required. Prerequisite: DHYG 1215 with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 1 credit hour. (W)

DHYG 2153 Dental Hygiene Practice

Emphasis on the laws governing the practice of dentistry and dental hygiene, moral standards, and the ethical standards established by the dental hygiene profession. Practice settings for the dental hygienist, office operations, preparation for employment and introduction to the dental team. Prerequisite: Admitted to the Dental Hygiene Program. Major Requirement: AAS - Dental Hygiene. 1 credit hour. (W)

DHYG 2201 Dental Hygiene Care I

Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better. Corequisite: DHYG 2361. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 2231 Dental Hygiene Care II

A continuation of Dental Hygiene Care I. Dental hygiene care for the medically or dentally compromised patient including advanced instrumentation techniques. Lab required. Prerequisites: DHYG 2201 and DHYG 2361; both with a grade of "C" or better. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 2361 Clinical II - Dental Hygienist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, this course is a method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Prerequisites: DHYG 1227 and DHYG 1261; both with a grade of "C" or better.

Corequisite: DHYG 2201. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

DHYG 2363 Clinical III-Dental Hygienist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: DHYG 2201 and DHYG 2361; both with a grade of "C" or better. Corequisite: DHYG 2231. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

DMSO 1167 Practicum 1 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 1 credit hour. (W)

DMSO 1201 Techniques of Medical Sonography

Scanning techniques. Includes scan protocols and procedures within the laboratory setting utilizing live scanning and/or simulated experience. Lab required. 2 credit hours. (W)

DMSO 1202 Basic Ultrasound Physics

Basic acoustical physics and acoustical waves in human tissue. Emphasis on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission, and resolution of sound beams. Lab required. 2 credit hours. (W)

DMSO 1210 Introduction to Sonography

An introduction to the profession of sonography and the role of the sonographer. Emphasis on medical terminology, ethical/legal aspects, written and verbal communication, and professional issues relating to registry, accreditation, professional organizations and history of the profession. 2 credit hours. (W)

DMSO 1266 Practicum 1 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 2 credit hours. (W)

DMSO 1366 Practicum 3 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 3 credit hours. (W)

DMSO 1441 Abdominopelvic Sonography

Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques,

transducer selection, and scanning protocols. Lab required. 4 credit hours. (W)

DMSO 1455 Sonographic Pathophysiology

Pathology and pathophysiology of the abdominal structures visualized with ultrasound. Includes abdomen and pelvis. Lab required. 4 credit hours. (W)

DMSO 1466 Practicum 2 - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 4 credit hours. (W)

DMSO 2230 Advanced Ultrasound and Review

Knowledge, skills, and professional values within a legal and ethical framework addressing emerging technologies and professional development. 2 credit hours. (W)

DMSO 2243 Advanced Ultrasound Physics

Theory and application of ultrasound principles. Includes advances in ultrasound technology. Lab required. Prerequisite: DMSO 1202. 2 credit hours. (W)

DMSO 2342 Sonography of High Risk Obstetrics

Maternal disease and fetal abnormalities. Includes scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Lab required. 3 credit hours. (W)

DMSO 2353 Sonography of Superficial Structures

Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Lab required. 3 credit hours. (W)

DMSO 2405 Sonography of Obstetrics/Gynecology

Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Lab required. 4 credit hours. (W)

DRAM 1120 Theatre Practicum I

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, this course is a practicum in theatre with emphasis on performance techniques and procedures, including a performance role in a college production. Flexible enrollment. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (A)
Note: Students may take DRAM 1120, DRAM 1121, DRAM 2120, and DRAM 2121 for a combined total of no more than 4 credit hours.

DRAM 1121 Theatre Practicum II

Practicum in theater open to all students with emphasis

on technique and procedures with experience gained in play productions. Additionally, this course is a practicum in theatre with emphasis on theatre techniques and procedures, including technical responsibilities in the production of a college play. Flexible enrollment. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (A)

Note: Students may take DRAM 1120, DRAM 1121, DRAM 2120, and DRAM 2121 for a combined total of no more than 4 credit hours.

DRAM 1310 Theater Appreciation

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

DRAM 1322 Stage Movement

Principles, practices, and exercises in awareness, relaxation, freedom, flexibility, and expressiveness in the actor's physical instrument. Lab required. 3 credit hours. (A)

DRAM 1330 Stagecraft I

Study and application of the methods and components of theatrical production which may include one or more of the following: theater, facilities, scenery construction and painting, properties, lighting, costume, makeup, sound, and theatrical management. Lab required. 3 credit hours. (A)

DRAM 1341 Stage Makeup

Design and execution of makeup for the stage performer. Includes discussion of makeup principles and practical experience of makeup application. Lab required. 3 credit hours. (A)

DRAM 1342 Costume Technology

Introduction to the process and application of the fundamental skills of costume production, modification, and maintenance. Lab required. 3 credit hours. (A)

DRAM 1351 Acting I

An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination. Lab required. 3 credit hours. (A)

DRAM 1352 Acting II

Exploration and further training within the basic principles and tools of acting, including an emphasis on critical analysis of oneself and others. The tools include ensemble performing, character and script analysis, and

basic theater terminology. This will continue the exploration of the development of the actor's instrument: voice, body and imagination. Lab required. Prerequisite: DRAM 1351 or consent of Associate Dean/Director. 3 credit hours. (A)

DRAM 2120 Theatre Practicum III

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, this course is a continuation of DRAM 1120, and is a practicum in theatre with emphasis on advanced performance techniques and procedures; as well as specialized training in practical skill areas related to performance. Flexible enrollment. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (A)

Note: Students may take DRAM 1120, DRAM 1121, DRAM 2120, and DRAM 2121 for a combined total of no more than 4 credit hours.

DRAM 2121 Theatre Practicum IV

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, this course is a continuation of DRAM 1121, and is a practicum in theatre with emphasis on advanced theatre techniques and procedures; as well as specialized training in practical skill areas related to technical theatre areas and theatre technology. Flexible enrollment. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (A)

Note: Students may take DRAM 1120, DRAM 1121, DRAM 2120, and DRAM 2121 for a combined total of no more than 4 credit hours.

DRAM 2331 Stagecraft II

Continued study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound and theatrical management. Lab required. 3 credit hours. (A)

DRAM 2335 Theater Design

Survey of principles and practices of theater design and its elements. The fundamentals of art and their application to major areas of theatrical design. Lab required. Prerequisite: DRAM 1330. 3 credit hours. (A)

DRAM 2336 Voice for the Actor

Principles, practices, and exercises in awareness, relaxation, freedom, flexibility, and expressiveness in the actor's vocal instrument. 3 credit hours. (A)

DRAM 2355 Script Analysis

Examination of foundational skills for understanding the structure and content of play scripts for interpretation and conceptualization in theater productions by directors,

designers, actors, and technicians. Introduces students to significant plays in the history of dramatic literature in the playwright's social and cultural context. 3 credit hours. (A)

DRAM 2361 History of Theater I

Study of the history of the theater from primitive times through the Renaissance. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

DRAM 2362 History of Theater II

Study of the history of the theater from the Renaissance through today. Prerequisite: Meet TSI requirement for INRW 0315; or equivalent. 3 credit hours. (A)

DRAM 2366 Film Appreciation

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Lab required. 3 credit hours. (A)

Note: Students may take either DRAM 2366 or COMM 2366, but not both.

DRAM 2389 Academic Co-op Drama

Integrates on campus study with practical hands-on work experience in drama. In conjunction with class seminars, the student will set specific goals and objectives in the study of drama. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

DSAE 1303 Introduction to Echocardiography Techniques

An introduction to scanning techniques and procedures with hands-on experience in a lab setting. Emphasis is placed on the sonographic evaluation of the normal adult heart. Lab required. 3 credit hours. (W)

DSAE 1340 Diagnostic Electrocardiography

Cardiac testing including the techniques and interpretation of patient physical assessment. Covers electrocardiography, stress testing, Holter monitoring, vital signs, and cardiovascular pharmacology. Lab required. 3 credit hours. (W)

DSAE 2235 Advanced Echocardiography

Advanced echocardiographic procedures. Topics include stress echo, related diagnostic imaging, and related noninvasive cardiac testing. Lab required. 2 credit hours. (W)

DSAE 2303 Cardiovascular Concepts

Anatomy, physiology, and pathophysiology of the cardiovascular system. Focuses on cardiac and vascular structural anatomy and relationships, electrical innervation, embryology, and hemodynamics of the heart and vascular system. Includes pathophysiology, etiology,

pathology, signs, symptoms, risk factors, and treatment of cardiovascular diseases. 3 credit hours. (W)

DSAE 2304 Echocardiographic Evaluation of Pathology I

Adult acquired cardiac pathologies. Topics include cardiovascular pathophysiology, quantitative measurements, and the application of 2-D, M-Mode, and Doppler. Recognition of the sonographic appearances of cardiovascular disease is stressed. Lab required. 3 credit hours. (W)

DSAE 2337 Echocardiographic Evaluation of Pathology II

A continuation of Echocardiographic Evaluation of Pathology I with emphasis on cardiac disease. A discussion of quantitative measurements and application of 2-D, M-Mode, Doppler, and recognition of the sonographic appearances of cardiac disease is stressed. Lab required. Prerequisite: DSAE 2304. 3 credit hours. (W)

DSAE 2355 Echocardiography Professionalism and Registry Review

Knowledge, skills and professional values within a legal and ethical context addressing emerging technologies and professional development as it relates to the field of echocardiography. Ergonomic techniques and equipment applications associated with technological advances in the field of echocardiography. Registry review techniques and registry preparedness. Lab required. 3 credit hours. (W)

DSPE 1200 Introduction to Pediatric Echocardiography Techniques

Introduction to pediatric echocardiography techniques and procedures. Emphasis is placed on the sonographic appearance of the normal neonatal and pediatric heart. Basic scan protocol to include 2D, M-mode, Doppler and standard measurements. 2 credit hours. (W)

DSVT 1300 Principles of Vascular Technology

Introduction to non-invasive vascular technology modalities. Includes 2D imaging, Doppler, plethysmography, and segmental pressures. Emphasis on performing basic venous and arterial imaging and non-imaging exams. Lab required. 3 credit hours. (W)

DSVT 2200 Vascular Technology Applications

Non-invasive vascular technology. Includes 2-D imaging, Doppler, plethysmography, and segmental pressures. Emphasizes protocols for performing basic venous and arterial imaging and non-imaging exams. Lab required. Prerequisite: DSVT 1300 2 credit hours. (W)

ECON 1301 Introduction to Economics

A survey of microeconomic and macroeconomic principles of non-business majors. Microeconomic topics

will include supply and demand, consumer behavior, price and output decisions by firms under various market structures, factor markets, market failures, international trade, and exchange rates. Macroeconomic topics will include national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth. 3 credit hours.

(A)

ECON 2301 Principles of Macroeconomics

An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ECON 2302 Principles of Microeconomics

Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ECON 2389 Academic Co-op Economics

Integrates on-campus study with practical hands-on work experience in economics. In conjunction with class seminars, the student will set specific goals and objectives in the study of economics. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

ECRD 1211 Electrocardiography

Fundamentals of cardiovascular anatomy and physiology. Includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities. Lab required. 2 credit hours. (W)

EDUC 1100 Learning Framework

A study of the research and theory in the psychology of learning, cognition, and motivation, factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g. learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. Lab required. 1 credit hour. (A)

Note: Students may only take one of the following: EDUC 1100, EDUC 1300.

EDUC 1300 Learning Framework

A study of the: research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. 3 credit hours. (A)

Note: Students may only take one of the following: EDUC 1100, EDUC 1300.

EDUC 1301 Introduction to the Teaching Profession

An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. The course provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations and provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; and the course must include a minimum of 16 contact hours of field experience in P-12 classrooms. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

EDUC 2301 Introduction to Special Populations

An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 16 contact hours of field experience in P-12

classrooms with special populations. Lab required. Prerequisite: EDUC 1301. 3 credit hours. (A)

EECT 1348 Digital Signal Processing (DSP)

A study of the architecture and applications of digital signal processors (DSP) including mathematical signal processing techniques. Lab required. 3 credit hours. (W)

EECT 2337 Wireless Telephony Systems

Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment, and access protocol. Lab required. 3 credit hours. (W)

EECT 2380 Cooperative Education - Electrical, Electronic and Communications Engineering Technology Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

EECT 2439 Communications Circuits

A study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. Lab required. Prerequisites: CETT 1425 and CETT 2471. 4 credit hours. (W)

ELMT 1301 Programmable Logic Controllers

An introduction to programmable logic controllers as used in industrial environments including basic concepts, programming, applications, troubleshooting of ladder logic, and interfacing of equipment. Lab required. Prerequisites: CETT 1409, CETT 1425, and ELMT 1305. 3 credit hours. (W)

ELMT 1305 Basic Fluid Power

Basic fluid power course covering pneumatic and hydraulic systems, fluid power symbols, operating theory, components, and basic electrical and manual controls. Lab required. Prerequisite: TECM 1343, or MATH 1316 or higher-level math. 3 credit hours. (W)

ELMT 2339 Advanced Programmable Logic Controllers

Advanced applications of programmable logic controllers as used in industrial environments including concepts of programming, industrial applications, troubleshooting

ladder logic, and interfacing to equipment. Lab required. Prerequisite: ELMT 1301. 3 credit hours. (W)

ELMT 2480 Cooperative Education - Electromechanical Technology

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisite: Consent of Associate Dean/Director. 4 credit hours. (W)

ELPT 1311 Basic Electrical Theory

Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current. Lab required. 3 credit hours. (W)

ELPT 1321 Introduction to Electrical Safety and Tools

Safety rules and regulations. Includes the selection, inspection, use, and maintenance of common tools for electricians. Lab required. 3 credit hours. (W)

ELPT 1325 National Electrical Code I

An introductory study of the National Electrical Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations. Prerequisites/Concurrent Enrollment: ELPT 1311 and ELPT 1321. 3 credit hours. (W)

ELPT 1329 Residential Wiring

Wiring methods for single family and multi-family dwellings. Includes load calculations, service entrance sizing, proper grounding techniques, and associated safety procedures. Lab required. Prerequisites/Concurrent Enrollment: ELPT 1311 and ELPT 1321. 3 credit hours. (W)

ELPT 1341 Motor Control

Operating principles of solid-state and conventional controls along with their practical applications. Includes braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretations. Lab required. Prerequisite/Concurrent Enrollment: ELPT 1357. 3 credit hours. (W)

ELPT 1345 Commercial Wiring

Commercial wiring methods. Includes overcurrent protection, raceway panel board installation, proper grounding techniques, and associated safety procedures.

Lab required. Prerequisites/Concurrent Enrollment: ELPT 1311 and ELPT 1321. 3 credit hours. (W)

ELPT 1357 Industrial Wiring

Wiring methods used for industrial installations. Includes motor circuits, raceway and bus way installations, proper grounding techniques, and associated safety procedures. Lab required. Prerequisite: ELPT 1345. 3 credit hours. (W)

ELPT 1371 Electrical Fundamentals

Introduction to basic principles of electricity and electrical systems. Topics include electrical calculations, electrical measurements, and electrical safety procedures. Note: This course is designed for non-electrical majors. Lab required. 3 credit hours. (W)

ELPT 2305 Motors and Transformers

Operation of single- and three-phase motors and transformers. Includes transformer banking, power factor correction, and protective devices. Lab required. Prerequisite/Concurrent Enrollment: ELPT 1357. 3 credit hours. (W)

ELPT 2325 National Electrical Code II

In-depth coverage of the National Electrical Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring protection and methods, special conditions, and advanced calculations. Prerequisite: ELPT 1325. 3 credit hours. (W)

EMSP 1160 Clinical-Emergency Medical Technician (EMT Paramedic)-Basic

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (W)

EMSP 1161 Clinical-Emergency Medical Technician (EMT Paramedic)-Advanced I

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (W)

EMSP 1162 Clinical-Emergency Medical Technician (EMT Paramedic)-Advanced II

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (W)

EMSP 1338 Introduction to Advanced Practice

Fundamental elements associated with emergency medical

services to include preparatory practices, pathophysiology, medication administration, and related topics. Lab required. Prerequisites: EMSP 1160 and EMSP 1371 and EMSP 1501, and a Texas EMT-Basic certification. 3 credit hours. (W)

EMSP 1355 Trauma Management

Knowledge and skills in the assessment and management of patients with traumatic injuries. Lab required. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

EMSP 1356 Patient Assessment and Airway Management

Knowledge and skills required to perform patient assessment, airway management, and artificial ventilation. Lab required. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

EMSP 1371 Introduction to Emergency Medical Technician (EMT)

Introduction to Emergency Medical Services including: history, organization and function, legal aspects, and ethics. Overview of human anatomy and physiology, patient assessment, airway control, and infection control techniques. Prerequisite: Consent of Associate Dean/Director. Corequisites: EMSP 1160 and EMSP 1501. 3 credit hours. (W)

EMSP 1501 Emergency Medical Technician

Preparation for certification as an Emergency Medical Technician (EMT). Lab required. Prerequisite: Consent of Associate Dean/Director. Corequisite: EMSP 1160. 5 credit hours. (W)

EMSP 2143 Assessment Based Management

A summative experience covering comprehensive, assessment-based patient care management for the paramedic level. Additionally, it includes specific care when dealing with pediatric, adult, geriatric, and special needs patients. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (W)

EMSP 2160 Clinical-Emergency Medical (EMT Paramedic)-Advanced III

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

EMSP 2206 Emergency Pharmacology

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Lab required. Prerequisite: Consent of Associate Dean/Director. 2 credit hours. (W)

EMSP 2267 Practicum-Emergency Medical (EMT Paramedic)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 2 credit hours. (W)

EMSP 2305 EMS Operations

Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

EMSP 2330 Special Populations

Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics, and other related topics. Lab required. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

EMSP 2534 Medical Emergencies

Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics. Lab required. Prerequisite: Consent of Associate Dean/Director. 5 credit hours. (W)

EMSP 2544 Cardiology

Assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation. Lab required. Prerequisite: Consent of Associate Dean/Director. 5 credit hours. (W)

ENGL 1301 Composition I

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. Lab required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ENGL 1302 Composition II

Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical

thinking about evidence and conclusions. Lab required. Prerequisite: ENGL 1301. 3 credit hours. (A)

ENGL 2307 Creative Writing I

Practical experience in the techniques of imaginative writing. May include fiction, non-fiction, poetry, screenwriting, or drama. Additionally, this course does not satisfy the college requirements for a sophomore literature course. Prerequisite: ENGL 1302. 3 credit hours. (A)

ENGL 2311 Technical and Business Writing

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents. Prerequisite: ENGL 1301. 3 credit hours. (A)

ENGL 2322 British Literature I

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2323 British Literature II

A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2327 American Literature I

A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2328 American Literature II

A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.

Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2332 World Literature I

A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2333 World Literature II

A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2341 Forms of Literature: Short Story, Novel, Poetry, and Drama

The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2389 Academic Co-op English

Integrates on-campus study with practical hands-on work experience in English. In conjunction with class seminars, the student will set specific goals and objectives in the study of English. Contact the Associate Dean/Director for more information. Prerequisites: Consent of Associate Dean/Director and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ENGR 1201 Introduction to Engineering

An introduction to the engineering profession with emphasis on technical communication and team-based engineering design. Prerequisite: MATH 1314 or equivalent academic preparation. 2 credit hours. (A)

ENGR 1304 Engineering Graphics

Introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics. Lab required. Prerequisite: MATH 1314 or equivalent academic preparation. 3 credit hours. (A)

ENGR 2105 Electrical Circuits I Laboratory

Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain

circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report preparation. Prerequisites: MATH 2414 and PHYS 2426. Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2305. 1 credit hour. (A)

ENGR 2301 Engineering Mechanics - Statics

Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia. Lab required. Prerequisites: MATH 2414 and PHYS 2425. 3 credit hours. (A)

ENGR 2302 Engineering Mechanics - Dynamics

Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Lab required. Prerequisite: ENGR 2301. 3 credit hours. (A)

ENGR 2305 Electrical Circuits I

Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first- and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Lab required. Prerequisites: MATH 2414 and PHYS 2426. Prerequisite/Concurrent Enrollment: MATH 2320. 3 credit hours. (A)

ENGR 2332 Mechanics of Materials

Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses. Additionally, behavior phenomena such as fracture, fatigue, and creep are introduced. Lab required. Prerequisite: ENGR 2301. 3 credit hours. (A)

ENTC 1171 Introduction to Engineering Technology

Topics address introduction to Electronic Engineering Technology, Robotics, Automation and Biomedical Equipment Technology industries and career pathways. 1 credit hour. (W)

ENVR 1401 Environmental Science I

Lecture: A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues,

including pollution, climate change, and sustainability of land, water, and energy resources. Lab: Activities will cover methods used to collect and analyze environmental data. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

Note: Students may take either ENVR 1401 or GEOL 1305 but not both.

ENVR 1402 Environmental Science II

Continued interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on energy issues, global warming, ozone loss, land use, conservation and management, deforestation, biodiversity, the history of environmental law and regulation and local environmental problems. Lab required. Prerequisite: ENVR 1401. 4 credit hours. (A)

ESLC 0305 ESL Listening/Speaking, Intermediate

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on developing non-native speakers' intermediate listening and speaking skills to facilitate natural communication. Oral skills are developed through individual presentations and interactions in dyads and in small and large groups. Aural skills are developed through classroom interaction, outside assignments, and video and audio clips designed to enhance non-native speakers' skills in understanding both formal and informal speech styles of English. Focus is given to students' spoken grammar, pronunciation, vocabulary, and exposure to U.S. culture. Lab required. Prerequisite: ESL New Student Assessment for ESLC 0305. 3 credit hours. (D)

Note: ESLC 0305, ESLC 0310, ESLC 0325, and ESLX 0305 may be taken for a combined total of no more than 9 credit hours.

ESLC 0310 ESL Listening/Speaking, Advanced

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Emphasis on developing non-native speakers' advanced oral communication and listening competencies. Students practice natural communication regarding abstract concepts in classroom activities by working in dyads and in small and large groups. Formal speaking skills are focused upon through delivery of individual short oral presentations. Students participate in advanced level listening activities through interaction both in and out of the classroom and the use of video and audio media. Focus is given to students' spoken grammar, pronunciation, vocabulary, and exposure to U.S. culture. Lab required. Prerequisite: ESL

New Student Assessment for ESLC 0310; or successful completion of ESLC 0305. 3 credit hours. (D)

Note: ESLC 0305, ESLC 0310, ESLC 0325, and ESLX 0305 may be taken for a combined total of no more than 9 credit hours.

ESLC 0325 ESL Listening/Speaking Transitioning

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in coursework. Emphasis on developing non-native speakers' advanced oral communication and listening competencies. Students practice natural communication regarding academic concepts in classroom activities by working in dyads and in small and large groups. Formal speaking skills are focused upon through delivery of individual researched presentations and debates. Students participate in advanced level listening activities through interaction both in and out of the classroom and the use of video and audio media. Focus is given to students' pronunciation, vocabulary, and research as well as successful transitioning to SPCH 1311. Lab required. Prerequisite: ESL New Student Assessment for ESLC 0325; or successful completion of ESLC 0310. 3 credit hours. (D)

Note: ESLC 0305, ESLC 0310, ESLC 0325, and ESLX 0305 may be taken for a combined total of no more than 9 credit hours.

ESLG 0305 ESL Grammar Intermediate

Instruction for non-native speakers focuses on verb tenses, subject-verb agreement, word order, parts of speech, and modal auxiliaries. Course content supports ESLW 0305 objectives for grammar usage. Lab required. Prerequisite: ESL New Student Assessment for ESLG 0305. 3 credit hours. (D)

ESLG 0310 ESL Grammar Advanced

Instruction for non-native speakers focuses on clause structure (independent and dependent), gerunds and infinitives, review of verb tenses, subject-verb agreement, and nouns and articles. Course content supports ESLW 0310 objectives for grammar usage. Lab required. Prerequisite: ESL New Student Assessment for ESLG 0310; or successful completion of ESLG 0305. 3 credit hours. (D)

ESLG 0325 ESL Grammar Transitioning

Instruction for non-native speakers focuses on a variety of clause and phrase structures: noun clauses, adjective clauses, adjective phrases, adverb clauses, adverbial phrases, and conditionals. Course content supports ESLW0325 objectives for grammar usage as well as successful transition into ENGL 1301. Lab required. Prerequisite: ESL New Student Assessment for ESLG

0325; or successful completion of ESLG 0310. 3 credit hours. (D)

ESLR 0305 ESL Reading Intermediate

Focuses on teaching students with intermediate level speaking and listening skills to identify topics, main ideas, and supporting details in simplified academic and literary texts. Lab required. Prerequisite: ESL New Student Assessment for ESLR 0305. Corequisite: ESLW 0305. 3 credit hours. (D)

Note: ESLR 0305, ESLR 0310, ESLR 0325, and ESLX 0310 may be taken for a combined total of no more than 9 credit hours.

ESLR 0310 ESL Reading Advanced

Focuses on teaching vocabulary from the Academic Word List, word families, context clues, topics, main ideas, supporting details, transitions, and organizational patterns for improving comprehension of abridged and unabridged academic and literary texts. Lab required. Prerequisite: ESL New Student Assessment for ESLR 0310; or successful completion of ESLR 0305 and ESLW 0305. Corequisite: ESLW 0310. 3 credit hours. (D)

Note: ESLR 0305, ESLR 0310, ESLR 0325, and ESLX 0310 may be taken for a combined total of no more than 9 credit hours.

ESLR 0325 ESL Reading Transitioning

Focuses on teaching non-native speakers of English with high intermediate reading skills to comprehend cultural allusions, connotation of vocabulary, implied main ideas, facts and opinions, inferences and conclusions, author's purpose, tone, point of view, and graphic aids in unabridged academic texts, accelerating reading rates and comprehension to transition to academic coursework. Lab required. Prerequisite: ESL New Student Assessment for ESLR 0325; or successful completion of ESLR 0310 and ESLW 0310. Corequisite: ESLW 0325. 3 credit hours. (D)

Note: ESLR 0305, ESLR 0310, ESLR 0325, and ESLX 0310 may be taken for a combined total of no more than 9 credit hours.

ESLW 0305 ESL Writing Intermediate

Focuses on sentence-level writing and paragraph-development (culminating in short multi-paragraph writing). Introduces students to pre-academic, academic, and experiential writing. Trains students to develop and organize ideas in a variety of rhetorical modes. Lab required. Prerequisite: ESL New Student Assessment for ESLW 0305. Corequisite: ESLR 0305. 3 credit hours. (D)

ESLW 0310 ESL Writing Advanced

Focuses on teaching sentence variety and academic essay writing in various rhetorical modes. Introduces concepts of summarizing articles with supported opinions, paraphrasing, and documentation. Lab required.

Prerequisite: ESL New Student Assessment for ESLW 0310; or successful completion of ESLR 0305 and ESLW 0305. Corequisite: ESLR 0310. 3 credit hours. (D)

ESLW 0325 ESL Writing Transitioning

Trains students to write academically acceptable papers in various rhetorical modes with a primary emphasis on argumentation. Focuses on mechanics of writing, common problems that ESL writers encounter, research, and documentation allowing students to successfully transition to ENGL 1301. Lab required. Prerequisite: ESL New Student Assessment for ESLW 0325; or successful completion of ESLR 0310 and ESLW 0310. Corequisite: ESLR 0325. 3 credit hours. (D)

ESLX 0305 ESL Pronunciation

Emphasis on aspects of spoken English, including stress and intonation, individual phonemes, and awareness of connected and reduced speech. Addresses pronunciation problems of specific language groups. Attention to productive and receptive skills is facilitated through classroom activities, student work in dyads and small and large groups. Lab required. Prerequisite: ESL New Student Assessment for ESLX 0305. 3 credit hours. (D)

Note: ESLC 0305, ESLC 0310, ESLC 0325, and ESLX 0305 may be taken for a combined total of no more than 9 credit hours.

ESLX 0310 ESL Vocabulary and Idioms

Instruction in idiomatic American English for second language learners. Increases familiarity with idiomatic English to facilitate comprehension and production of idioms in spoken and written discourse. Lab required. Prerequisite: ESL New Student Assessment for ESLR 0310; or successful completion of ESLR 0305. 3 credit hours. (D)

Note: ESLR 0305, ESLR 0310, ESLR 0325, and ESLX 0310 may be taken for a combined total of no more than 9 credit hours.

ESLX 0325 Test-Taking and Study Skills for Non-Native English Speakers

Prepares non-native English-speaking students for success by providing instruction and practice in test-taking techniques as well as exposing them to the expectations and realities of college academic coursework. Topics include information processing, memory retention, strategic learning, self-regulation, goal setting, motivation, educational planning, and learning styles. Techniques of study such as organization, time-management, listening/speaking/reading/writing in a lecture or classroom setting, note-taking, research skills, and test preparation will be covered. Lab required. Prerequisite: ESL New Student Assessment for ESLX

0325; or successful completion of ESLR 0310 and ESLW 0310. 3 credit hours. (D)

FIRS 1301 Firefighter Certification I

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: Admission to the Program. 3 credit hours. (W)

FIRS 1313 Firefighter Certification III

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Prerequisites: FIRS 1407. 3 credit hours. (W)

FIRS 1319 Firefighter Certification IV

One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1313. 3 credit hours. (W)

FIRS 1323 Firefighter Certification V

One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1319. 3 credit hours. (W)

FIRS 1329 Firefighter Certification VI

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1323. 3 credit hours. (W)

FIRS 1407 Firefighter Certification II

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course

#100. Lab required. Prerequisite: FIRS 1301, or consent of Associate Dean/Director. 4 credit hours. (W)

FIRS 1433 Firefighter Certification VII

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1329. 4 credit hours. (W)

FIRS 1491 Special Topics in Fire Science/Firefighting

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. 4 credit hours. (W)

Rope Rescue

Fundamental skills required for safe and efficient rescue utilizing rope and specialized rescue equipment. Topics, skills and knowledge meet applicable Rescue Technician Professional Qualifications in accordance with National Fire Protection Association (NFPA) 1006.

FIRS 2344 Driver/Operator-Pumper

Meets curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Driver/Operator-Pumper. 3 credit hours. (W)

FIRT 1301 Fundamentals of Fire Protection

Orientation to the fire service, career opportunities, and related fields. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. 3 credit hours. (W)

FIRT 1315 Hazardous Materials I

The chemical characteristics and behavior of various materials. Storage, transportation, handling hazardous emergency situations, and the methods of hazard mitigation. 3 credit hours. (W)

FIRT 1327 Building Construction in the Fire Service

Components of building construction that relate to life safety. Includes relationship of construction elements and building design impacting fire spread in structures. 3 credit hours. (W)

FIRT 1338 Fire Protection Systems

Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. This course meets Fire and

Emergency Services Higher Education (FESHE) Model Curriculum core requirements. Must be a certified firefighter to enroll in this course. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

FIRT 1349 Fire Administration II

In-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and the relationships between the fire service and outside agencies. 3 credit hours. (W)

FIRT 1391 Special Topics in Fire Protection and Safety Technology/Technician

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. 3 credit hours. (W)

Haz-Mat Technical Response

Advanced skills for safe and effective mitigation of hazardous material and other complex incidents. Topics address all types of transportation and fixed facility emergencies consistent with National Fire Protection Association (NFPA) 1072. Prerequisite: Proof of Basic Firefighter certification or Hazardous Materials Awareness and Operations level certification from the Texas Commission on Fire Protection.

FIRT 1392 Special Topics in Fire Services Administration

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. 3 credit hours. (W)

Officer Leadership

Course focused on fire executive management with emphasis on budgeting, human resources, emergency service delivery, planning, current events, and risk management in accordance with National Fire Protection Association (NFPA) 1021. Prerequisite: FIRT 1443 or proof of Fire Officer II certification from the Texas Commission on Fire Protection.

FIRT 1442 Fire Officer I

Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer I certification. 4 credit hours. (W)

FIRT 1443 Fire Officer II

Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer

II certification. Prerequisites: FIRT 1442 and FIRT 2305, or consent of Associate Dean/Director. 4 credit hours. (W)

FIRT 2305 Fire Instructor I

Preparation of fire and emergency services personnel to deliver instruction from a prepared lesson plan. Includes the use of instructional aids and evaluation instruments to meet the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Instructor I certification. Prerequisite: Student must show proof of Basic Firefighter Certification from the Texas Commission on Fire Protection (TCFP), or consent of Associate Dean/Director. 3 credit hours. (W)

FIRT 2307 Fire Instructor II

Development of individual lesson plans for a specific topic including learning objectives, instructional aids, and evaluation instruments. Includes techniques for supervision and coordination of activities of other instructors to meet the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Instructor II certification. Prerequisite: FIRT 2305 or consent of Associate Dean/Director. 3 credit hours. (W)

FIRT 2309 Firefighting Strategies and Tactics I

Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of staffing and equipment to mitigate the emergency. Must be a certified firefighter to enroll in this course. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

FIRT 2351 Company Fire Officer

A capstone course covering fire ground operations and supervisory practices. Includes performance evaluation of incident commander, safety officer, public information officer, and shift supervisor duties. 3 credit hours. (W)

FITT 1370 Sports Tourism

An examination of sport tourism in Collin County and its economic and social impact on the community and beyond. 3 credit hours. (W)

FITT 1371 Principles of Promoting and Selling Sport and Recreation

A survey of the selling process, advertising, consumer behavior, market research, strategic planning of sport or recreation as a consumer product. 3 credit hours. (W)

FITT 1373 Legal and Ethical Issues in Sport and Recreation Management

Examination of legal and ethical concepts related to sport and recreation management. Topics will include athletic participation and eligibility, public facility use issues, constitutional due process, and contracts and tort law as applied to participants and spectators. Concepts, models,

and techniques to use in managing ethical dilemmas will be explored. 3 credit hours. (W)

FITT 1380 Cooperative Education - Health and Physical Education, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement between the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

FITT 2371 Leadership in Sport and Recreation

Principles of Leadership. The role of administration and leadership in the objectives, organization, and procedures of sport and recreational organizations. 3 credit hours. (W)

FLMC 1301 History of Animation Techniques

A historical perspective of two-dimensional (2-D) and three-dimensional (3-D) animation. This class teaches students traditional forms of animation including cell, stop-motion and zoetropes. Students will also learn the history and evolution of the animation art form. Students will produce original animations utilizing traditional techniques as projects. Lab required. 3 credit hours. (W)

FLMC 1331 Video Graphics and Visual Effects I

A course in the applications of computers for video production. Design of computer graphic workstations and development of a rationale for selecting software, hardware, and peripherals. Lab required. Prerequisites: ARTC 1325 and ARTV 1371, or ARTV 1351. 3 credit hours. (W)

FLMC 2330 Audio Post Production

Skill development utilizing the technology, creative application and requirements for producing audio soundtracks for film and video. Lab required. 3 credit hours. (W)

FLMC 2331 Video Graphics and Visual Effects II

Advanced concepts of designing vector and raster graphics, executing rendering techniques, designing and producing three dimensional (3-D) materials, and selecting hardware, software, and peripherals for video production. Lab required. Prerequisite: FLMC 1331. 3 credit hours. (W)

FLMC 2333 Cinematography

Advanced concepts of theoretical elements and practical applications of the cinematic craft. Lab required. Prerequisite: RTVB 1325. 3 credit hours. (W)

FLMC 2334 Directing for Film or Video

Analysis of directing styles to formulate a personal

directing style. Includes directing a film or video production. Lab required. Prerequisite: ARTV 1351. 3 credit hours. (W)

FLMC 2336 Production Development - Producing

In-depth study of the sequential steps of supervision in all phases of film or video production and distribution, including resource acquisition and allocation. Lab required. Prerequisites: RTVB 1329 and ARTV 1351. 3 credit hours. (W)

FLMC 2380 Cooperative Education - Cinematography and Film/Video Production

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisites: ARTV 2320 and FLMC 2333. 3 credit hours. (W)

FREN 1411 Beginning French I

Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. Lab required. 4 credit hours. (A)

FREN 1412 Beginning French II

Continuation of FREN 1411. Lab required. Prerequisite: FREN 1411 or consent of Associate Dean/Director. 4 credit hours. (A)

FREN 2311 Intermediate French I

Continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: FREN 1412 or consent of Associate Dean/Director. 3 credit hours. (A)

FREN 2312 Intermediate French II

Continuation of FREN 2311. Prerequisite: FREN 2311 or consent of Associate Dean/Director. 3 credit hours. (A)

GAME 1303 Introduction to Game Design and Development

Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry.

Lab required. Prerequisite: ARTV 1345 or consent of Associate Dean/Director. 3 credit hours. (W)

GAME 2309 Video Game Art II

A study of industry-used, game-art techniques and its applications of game art assets. Utilizes tools and advanced techniques in the creation of assets for a game engine. Lab required. Prerequisite: ARTV 2345 or consent of Associate Dean/Director. 3 credit hours. (W)

GAME 2325 3-D Animation II - Character Set-Up

Character animation for application interfaces. Prerequisite: ARTV 1341. Lab required. 3 credit hours. (W)

GAME 2336 Lighting, Shading and Texture

Advanced application of lighting, shading, and texture techniques to increase system performance for digital games and simulation models. Lab required. Prerequisite: ARTV 2345 or consent of Associate Dean/Director. 3 credit hours. (W)

GAME 2341 Game Scripting

Scripting languages with emphasis on game concepts and simulations. Lab required. Prerequisite: GAME 1303 or consent of Associate Dean/Director. 3 credit hours. (W)

GAME 2359 Game and Simulation Group Project

Creation of a game and/or simulation project utilizing a team approach. Includes the integration of design, art, audio, programming, and quality assurance. Lab required. Prerequisite: GAME 1303. 3 credit hours. (W)

GAME 2386 Internship-Animation, Interactive Technology, Video Graphics and Special Effects

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: ARTV 1341. 3 credit hours. (W)

GEOG 1301 Physical Geography

This course introduces students to the processes that drive Earth's physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GEOG 1302 Human Geography

This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture,

diffusion, political and economic systems, language, religion, gender, and ethnicity. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GEOG 1303 World Regional Geography

This course is an introduction to the world's major regions seen through their defining physical, social, cultural, political, and economic features. These regions are examined in terms of their physical and human characteristics and their interactions. The course emphasizes relations among regions on issues such as trade, economic development, conflict, and the role of regions in the globalization process. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GEOL 1305 Environmental Science - Natural Disasters

A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Prerequisite: Meet TSI standard for MATH 0405, and TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

Note: Students may take either ENVR 1401 or GEOL 1305 but not both.

GEOL 1401 Earth Sciences for Non Science Majors I

Lecture: Survey of geology, meteorology, oceanography, and astronomy. Lab: Activities will cover methods used to collect and analyze data in geology, meteorology, oceanography, and astronomy. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 1402 Earth Sciences for Non Science Majors II

Lecture: Extension of the study of geology, astronomy, meteorology and oceanography, focusing on natural resources, hazards and climate variability. Lab: Activities will focus on methods used to collect and analyze data related to natural resources, hazards and climate variability. Lab required. Prerequisite: GEOL 1401 or GEOL 1403. 4 credit hours. (A)

GEOL 1403 Physical Geology

Lecture: Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Lab: Laboratory activities will cover methods used to collect and analyze

earth science data. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 1404 Historical Geology

Lecture: A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Lab: Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils. Lab required. Prerequisite: GEOL 1403. 4 credit hours. (A)

GEOL 1445 Oceanography

A study of the various aspects of the ocean, including origins of the ocean, earth's ocean, plate tectonics, ocean sediments, the chemistry of seawater, oceans and climate, currents, waves, tides, coastal features, oceanic ecosystems, protection of coastal areas, and resources of the oceans. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 1447 Introduction to Meteorology

An examination of the Earth's atmosphere, global climate, and associated environmental factors. Includes lab exercises in weather tracking on Weather-Net computer system. Lab required. Prerequisite: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 2389 Academic Co-op Geology

Integrates on-campus study with practical hands-on work experience in geology. In conjunction with class seminars, the student will set specific goals and objectives in the study of geology. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

GERM 1411 Beginning German I

Introduction to the basic skills of speaking, reading, writing, and listening; designed for students with little or no previous language training. Includes attention to selected aspects of German civilization. Instruction enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

GERM 1412 Beginning German II

Continuation of GERM 1411 with an emphasis on the reading of elementary texts. Lab required. Prerequisite:

GERM 1411 or consent of Associate Dean/Director. 4 credit hours. (A)

GERM 2311 Intermediate German I

Continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by tapes, slides, and other audio-visual aids. Prerequisite: GERM 1412 or consent of Associate Dean/Director. 3 credit hours. (A)

GERM 2312 Intermediate German II

Continuation of GERM 2311. Prerequisite: GERM 2311 or consent of Associate Dean/Director. 3 credit hours. (A)

GERS 1160 Clinical - Gerontology

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

GERS 1301 Introduction to Gerontology

Overview of the social, psychological, and biological changes that accompany aging. Focuses on the implications of these changes for the individual, as well as for the larger society. Lab required. 3 credit hours. (W)

GERS 1304 Activity Directing I

The role of the director in providing activity services. Includes study of history, regulations, communications, advocacy, ethics, service delivery, and volunteer management. Lab required. 3 credit hours. (W)

GERS 1307 Activity Directing II

The role of the director in providing activity services. Includes assessment, care planning, documentation process, and evaluation of client needs. Also addresses program design and resources/funding. Lab required. Prerequisite: GERS 1304. 3 credit hours. (W)

GERS 1343 Psychology of Adult Development and Aging

Study of the cognitive aspects of adult development and aging. 3 credit hours. (W)

GERS 2160 Clinical - Gerontology

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

GERS 2161 Clinical - Gerontology

A health-related work-based learning experience that enables the student to apply specialized occupational

theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

GERS 2332 Advanced Activity Director

An advanced course for activity professionals focusing on management skills for activity programs for older adults. Includes a system for developing activity programs, administrative practices, and communication techniques for the activity professional. Lab required. 2 credit hours. (W)

GISC 1411 Introduction to Geographic Information Systems (GIS)

Introduction to basic concepts of vector GIS using several industry specific software programs. It also includes nomenclature of cartography and geography. Additionally, students will learn to display map data, change symbology, classify features and rasters, use dynamic labeling, join and relate tables, define projections, dissolve features, clip layers, create a geodatabase, and build a GIS model. Lab required. 4 credit hours. (W)

GISC 2172 Geospatial Information Science (GIS) Portfolio Development

The goal of a professional GIS portfolio is to showcase your skills as a GIS professional. In this course, you will develop a professional GIS portfolio of your best work as completed in your other GIS courses. Lab required. 1 credit hour. (W)

GISC 2231 Advanced Problems in Geographic Information Systems (GIS)

Seminar/Capstone course designed for the final semester of a degree or certificate in Geographic Information Systems (GIS). Projects will include individual and group studies of GIS applications using the skills acquired in previous courses. The student will produce a professional project and present the results to a panel consisting of peers, instructors, or practicing GIS professionals. Lab required. Prerequisites: GISC 2402 and GISC 2420. 2 credit hours. (W)

GISC 2250 Scripting for Geographic Information Systems (GIS)

Using scripting languages to automate tasks in Geographic Information Systems (GIS) environments. Introduces scripting and model building techniques used to enhance and customize GIS applications. Lab required. Prerequisite: GISC 1411. 2 credit hours. (W)

GISC 2281 Cooperative Education-Cartography/GIS

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work

experience. Includes a lecture component. Prerequisite: GISC 2420. 2 credit hours. (W)

GISC 2311 Geographic Information Systems (GIS) Applications

Application of GIS technology to real workplace applications from public and private sectors. Completion of Global Positioning Systems (GPS) fieldwork required for lab exercises. Lab required. Prerequisite: GISC 1411. 3 credit hours. (W)

GISC 2335 Programming for Geographic Information Systems (GIS)

Focuses on the use of programming languages to customize and expand the capability of GIS applications. Instruction will include object-oriented and component programming. Students will also design their own Graphical User Interface (GUI). Lab required. Prerequisites: GISC 2420 and ITSE 1359. 3 credit hours. (W)

GISC 2359 Web-Served Geographic Information Systems (GIS)

Delivery of geographic data via the Internet. Includes composition of the map features distributed and introduction on the use of markup languages to customize web-based Geographic Information Systems (GIS). Lab required. Prerequisite: GISC 1411. Prerequisite/Concurrent Enrollment: GISC 2420. 3 credit hours. (W)

GISC 2402 Geographic Information Systems (GIS) Design with Raster Analysis

Raster/remote sensing principles, technologies, and applications. Emphasizes processing raster imagery into useful information to be used in a GIS. Includes georeferencing and image classification. Student final project will be demonstrating raster and remote sensing techniques. Lab required. Prerequisite/Concurrent Enrollment: GISC 1411. 4 credit hours. (W)

GISC 2420 Intermediate Geographic Information Systems (GIS)

This course focuses on the study of spatial data structures and the display, manipulation, and analysis of geographic information. Students will study the technical aspects involved in spatial data handling, analysis, and modeling. Instruction will include theories and procedures associated with the implementation and management of GIS projects. A variety of GIS software packages will be used in the laboratory. Lab required. Prerequisite: GISC 1411. 4 credit hours. (W)

GISC 2459 Web-Served Geographic Information Systems (GIS)

Delivery of geographic data via the Internet. Includes composition of the map features distributed and

introduction on the use of markup languages to customize web-based Geographic Information Systems (GIS). Lab required. Prerequisite: GISC 1411. Prerequisite/Concurrent Enrollment: GISC 2420. 4 credit hours. (W)

GOVT 2107 Federal and Texas Constitutions

A study of the United States and state constitutions with special emphasis on Texas. Prerequisites: By permission only, and meet TSI college-readiness standard for Reading and Writing; or equivalent. Enrollment limited to students who have already completed a minimum of six (6) credit hours of GOVT courses but have not satisfied the statutory requirement for study of the federal and state constitutions. Ensures compliance with TEC 51.301. 1 credit hour. (A)

GOVT 2304 Introduction to Political Science

Introductory survey of the discipline of political science focusing on the scope and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2305 Federal Government (Federal constitution and topics)

Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2306 Texas Government (Texas constitution and topics)

Origin and development of the Texas Constitution, structure and powers of the state and local government, federalism and inter-governmental relations, political participation, the election process, public policy and the political culture of Texas. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2311 Mexican-American Politics

This course explores the impact of Mexican-Americans on U.S. politics and political institutions and public policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2389 Academic Co-op Government

Integrates on-campus study with practical hands-on work experience in government. In conjunction with class seminars, the student will set specific goals and objectives in the study of government. Contact the Associate

Dean/Director for more information. Prerequisites: Consent of Associate Dean/Director, and meet TSI college-readiness standard for Writing; or equivalent. 3 credit hours. (A)

HALT 2308 Greenhouse Management

Fundamentals of greenhouse construction and operation. Topics include architectural styles, construction materials, environmental systems and controls, growing media, fertilizers, post-harvest handling, marketing, and business management. 3 credit hours. (W)

HALT 2402 Greenhouse Crop Production

Production of crops within the greenhouse environment. Topics include growing techniques, environmental control, crop rotation, scheduling, preparation for sale, and marketing. Lab required. 4 credit hours. (W)

HALT 2421 Small Farming

Instruction in small farming techniques with emphasis on horticulture science including comprehensive and profitable guidelines. Topics include herbs, fruit, nut, and vegetable crops. Lab required. 4 credit hours. (W)

HAMG 1313 Front Office Management

Functions of front office operations as they relate to customer service. Includes a study of front office interactions with other departments in the lodging operation. Prerequisite / Concurrent Enrollment: HAMG 1321. 3 credit hours. (W)

HAMG 1317 Recreational Services

The study of the recreation and entertainment industry. Emphasizes sporting and entertainment venues, tourism attractions, and other public and private sector special events. 3 credit hours. (W)

HAMG 1321 Introduction to Hospitality Industry

An exploration of the elements and career opportunities within the multiple segments of the hospitality industry. 3 credit hours. (W)

HAMG 1324 Hospitality Human Resources Management

Principles and procedures of human resource management in the hospitality industry. Prerequisite / Concurrent Enrollment: HAMG 1321. 3 credit hours. (W)

HAMG 1340 Hospitality Legal Issues

A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor

regulations, tax laws, tip reporting, franchise regulations, and product liability laws. 3 credit hours. (W)

HAMG 1366 Practicum (or Field Experience) - Hospitality Administration/Management, General

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite / Concurrent Enrollment: HAMG 2301. 3 credit hours. (W)

HAMG 2301 Principles of Food and Beverage Operations

An overview of food and beverage management in various hospitality environments. Emphasizes cost controls from procurement to marketing and sales. Prerequisite / Concurrent Enrollment: HAMG 1321. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

HAMG 2305 Hospitality Management and Leadership

An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formation, communications, motivation, and team building. Prerequisites: HAMG 1324, HAMG 1340, HAMG 2301, HAMG 2307 and TRVM 2301; or consent of Associate Dean/Director. 3 credit hours. (W)

HAMG 2307 Hospitality Marketing and Sales

Identification of the core principles of marketing and sales and their impact on the hospitality industry. Prerequisite / Concurrent Enrollment: HAMG 1321. 3 credit hours. (W)

HAMG 2332 Hospitality Financial Management

Methods and application of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. Prerequisite / Concurrent Enrollment: HAMG 1321. 3 credit hours. (W)

HAMG 2337 Hospitality Facilities Management

Identification of hospitality building systems and facilities; to include sustainability and risk management. Prerequisite / Concurrent Enrollment: HAMG 1321. 3 credit hours. (W)

HAMG 2380 Cooperative Education-Hospitality Administration/Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work

experience. Includes a lecture component. Contact the Associate Dean/Director for more information.

Prerequisites: CHEF 1305, HAMG 1313, HAMG 1324, HAMG 1340, HAMG 2337, RSTO 1325 and TRVM 2301; or consent of Associate Dean/Director. 3 credit hours. (W)

HART 1303 Air Conditioning Control Principles

A basic study of HVAC and refrigeration controls; troubleshooting of control components; emphasis on use of wiring diagrams to analyze high and low voltage circuits; a review of Ohm's law as applied to air conditioning controls and circuits. Lab required. 3 credit hours. (W)

HART 1371 HVAC Fundamentals

Introduction to the principles and equipment that makes up an HVAC system. Basic installation, maintenance, and troubleshooting will be covered.

Note: This course is designed for non-HVAC majors. Lab required. 3 credit hours. (W)

HART 1401 Basic Electricity for HVAC

Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation. Lab required. Prerequisite: Departmental Permit. Corequisite: HART 1407. 4 credit hours. (W)

HART 1407 Refrigeration Principles

An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components, and safety. Lab required. Prerequisite: Departmental Permit. Corequisite: HART 1401. 4 credit hours. (W)

HART 1441 Residential Air Conditioning

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Lab required. Prerequisites: HART 1401 and HART 1407, and Departmental Permit. Corequisite: HART 1445. 4 credit hours. (W)

HART 1445 Gas and Electric Heating

Study of the procedures and principles used in servicing heating systems including gas fired furnaces and electric heating systems. Lab required. Prerequisites: HART 1401 and HART 1407, and Departmental Permit. Corequisite: HART 1441. 4 credit hours. (W)

HART 2334 Advanced A/C Controls

Theory and application of electrical control devices, electromechanical controls, and/or pneumatic controls.

Lab required. Prerequisites: HART 2431 and HART 2438. 3 credit hours. (W)

HART 2341 Commercial Air Conditioning

A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. Additionally, course of study will include: Commercial split systems, rooftop units, fan features and analysis and more. Lab required. Prerequisites: HART 2349 and HART 2345. 3 credit hours. (W)

HART 2342 Commercial Refrigeration

Theory and practical application in the maintenance of commercial refrigeration; medium, and low temperature applications and ice machines. Lab required. Prerequisites: HART 1407 and HART 2431. 3 credit hours. (W)

HART 2343 Industrial Air Conditioning

A study of components, accessories, applications, and installation of air conditioning systems above 25 tons capacity. Lab required. Prerequisites: HART 2341 and HART 2342. Corequisite: HART 2334. 3 credit hours. (W)

HART 2345 Residential Air Conditioning Systems Design

Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Lab required. Prerequisite: HART 2438. Corequisite: HART 2349. 3 credit hours. (W)

HART 2349 Heat Pumps

A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. Lab required. Prerequisite: HART 2431. Corequisite: HART 2345. 3 credit hours. (W)

HART 2358 Testing, Adjusting, and Balancing HVAC Systems

A study in the process of checking and adjusting all the building environmental systems to produce the design objectives. Emphasis on efficiency and energy savings. Lab required. Prerequisites: HART 2345, HART 2343, and HART 2334. 3 credit hours. (W)

HART 2431 Advanced Electricity for HVAC

Advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution motors, motor controls, and application of solid state devices. Lab required.

Prerequisites: HART 1441 and HART 1445. Corequisite: HART 2438. 4 credit hours. (W)

HART 2438 Air Conditioning Installation and Startup

A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on startup and performance testing. Lab required. Prerequisites: HART 1441 and 1445. Corequisite: HART 2431. 4 credit hours. (W)

HIST 1301 United States History I

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 1302 United States History II

A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2301 Texas History

A survey of the political, social, economic, cultural, and intellectual history of Texas from pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2311 Western Civilization I

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western

Civilization I include cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2312 Western Civilization II

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2321 World Civilizations I

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2322 World Civilizations II

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2327 Mexican-American History I

This course is a survey of the political, economic, social and cultural history of Mexicans in North America from the pre-Colombian Era through 1850, with emphasis on the Mexican-American War with the United States.

Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2328 Mexican-American History II

This course is a survey of the political, economic, social and cultural history of Mexicans in North America from 1850 to present, with emphasis on the Mexican-American cultural identity and the Civil Rights Movement in the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2381 African American History I

A survey of the social, political, economic, cultural, and intellectual history of people of African descent in the formation and development of the United States to the Civil War/Reconstruction period. African American History I includes the study of African origins and legacy, transAtlantic slave trade, and the experiences of African Americans during Colonial, Revolutionary, Early National, Antebellum, and the Civil War/Reconstruction Eras. This course will enable students to understand African American history as an integral part of U.S. history. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2382 African American History II

A survey of the social, political, economic, cultural, and intellectual history of people of African descent in the United States from the Civil War/Reconstruction period to the present. African American History II examines segregation, disenfranchisement, civil rights, migrations, industrialization, world wars, the Harlem Renaissance and the conditions of African Americans in the Great Depression, Cold War and post-Cold War eras. This course will enable students to understand African American history as an integral part of U.S. history. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2389 Academic Co-op History

Integrates on-campus study with practical hands-on work experience in history. In conjunction with class seminars, the student will set specific goals and objectives in the study of history. Contact the Associate Dean/Director for more information. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (A)

HITT 1301 Health Data Content and Structure

Introduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health related information including content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens. Lab

required. Prerequisite/ Concurrent Enrollment: HITT 1305. 3 credit hours. (W)

HITT 1303 Medical Terminology II

A continuation of the study of medical terms through work origin and structure, abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. Lab required. Prerequisite: HITT 1305. 3 credit hours. (W)

HITT 1305 Medical Terminology I

Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. 3 credit hours. (W)

HITT 1311 Health Information Systems

Introduction to health IT standards, health-related data structures, software applications and enterprise architecture in health care and public health. Lab required. 3 credit hours. (W)

HITT 1345 Health Care Delivery Systems

Examination of delivery systems including organization, financing, accreditation, licensure, and regulatory agencies. This course covers alternative health care delivery systems. Lab required. 3 credit hours. (W)

HITT 1353 Legal and Ethical Aspects of Health Information

Concepts of privacy, security, confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information. Prerequisite: HITT 1305. 3 credit hours. (W)

HITT 2272 Portfolio Development

Preparation and enhancement of portfolio to meet professional standards, development of presentation skills, and improvement of job-seeking techniques. Lab required. Prerequisites: ITSE 2309 and MATH 1342. 2 credit hours. (W)

HITT 2328 Introduction to Public Health

A survey of how health care and public health services are organized and delivered in the U.S. Covers public policy, relevant organizations and their interrelationships, professional roles, legal and regulatory issues, and payment systems. Includes health reform initiatives in the U.S. 3 credit hours. (W)

HITT 2339 Health Information Organization and Supervision

Principles of organization and supervision of human, financial, and physical resources. Lab required. Major Requirement: AAS-Health Information Management.

Prerequisites: HITT 1301, HITT 1305. 3 credit hours. (W)

HITT 2346 Advanced Medical Coding

Advanced concepts of ICD and CPT coding rules, conventions, and guidelines in complex case studies. Investigation of government regulations and changes in health care reporting. Lab required. Prerequisites: BIOL 2404, HITT 1305, and HITT 2435. 3 credit hours. (W)

HITT 2361 Clinical II-Health Information/Medical Records Technology

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students should take this course in their final semester. Prerequisites: Consent of Associate Dean/Director. 3 credit hours. (W)

HITT 2430 Pathophysiology and Pharmacology

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Lab required. 4 credit hours. (W)

HITT 2435 Coding and Reimbursement Methodologies

Advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement. The student is recommended to complete BIOL 2404 prior to registering for this course, but not required. Lab required. 4 credit hours. (W)

HITT 2443 Quality Assessment and Performance Improvement

Study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues. Approaches to assessing patient safety issues and implementation of quality management and reporting through electronic systems. Lab required. Prerequisite: HITT 1301, and meet TSI college-readiness standard for Mathematics; or equivalent. 4 credit hours. (W)

HPRS 1102 Wellness and Health Promotion

An overview of wellness theory and its application throughout the life span. Focus is on attitude

development, impact of cultural beliefs, and communication of wellness. 1 credit hour. (W)

HPRS 1160 Clinical - Health Services/Allied Health/Health Sciences, General

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

HPRS 1201 Introduction to Health Professions

An overview of roles of various members of the health care system, educational requirements, and issues affecting the delivery of health care. 2 credit hours. (W)

HPRS 1204 Basic Health Profession Skills

A study of the concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods. Lab required. 2 credit hours. (W)

HPRS 1206 Essentials of Medical Terminology

A study of medical terminology, word origin, structure, and application. Lab required. 2 credit hours. (W)

HPRS 1272 Microbiology for Health Professions

An introduction to the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and the role microorganisms have in disease. Emphasis is on medical microbiology and infectious diseases. Lab required. Prerequisites: BIOL 2401 and BIOL 2402; both with a grade of "C" or better. 2 credit hours. (W)

HPRS 1303 End of Life Issues

Discussion of grief, loss, and end of life issues. Prepares caregivers to function in settings where communication skills are utilized to provide psychosocial support to persons and their families. 3 credit hours. (W)

HPRS 1310 Introduction to Pharmacology

A study of drug classifications, actions, therapeutic uses, adverse effects, and routes of administration. Does NOT include dosage calculations. 3 credit hours. (W)

HPRS 1370 Central Sterile Processing II

This course explores two subsections of the IAHCSSM Certification program: A) Inventory Control-prepares the student with organizational skills needed to control, track and distribute inventory through the use of different techniques in inventory control and distribution, as well as the use of bar codes and radio frequency identification to track inventories. B) Sterile Storage and Distribution-introduces the basic procedures of packaging processes through a comparison of reusable and disposable packaging materials, basic package closure methods, and

factors, which affect shelf-life and stock rotation. Lab required. 3 credit hours. (W)

HPRS 1470 Central Sterile Processing I

This course will teach subsections of the IAHCSSM Certification program related to: A) Introduction to Central Service-an introduction to the central service role, surgical supplies, basic and specialty surgical instruments, and packaging and sterilization. B) Infection Control and Occupational Safety-related to the principles and practice of infection control and OSHA guidelines along with common safety and hazards protocols. C) Regulations and Standards-teaches the difference between the regulations and voluntary and regulatory standards, the role and responsibilities of federal agencies that impact Central Services, and the important aspects of the regulations and standards they administer. Lab required. 4 credit hours. (W)

HPRS 1471 Central Sterile Processing III

An exploration of the subsections of the IAHCSSM Certification program: A) Instrument and Instrument Identification-identifying surgical instruments by name and purpose, examination of the process by which surgical instruments are manufactured and prepared for the sterilization process. B) Endoscopic Instruments-proper care, handling and processing of endoscopic instruments. C) Decontamination-describe how reusable equipment, instruments, and supplies are cleaned and decontaminated by means of manual or mechanical cleaning processes and chemical disinfection and the proper use of Personal Protective Equipment (PPE) and Standard Precautions. D) Preparation and Handling-relates to basic principles of various packaging materials and closure methods used for sterilization preparation as they relate to the Association of Advancement of Medical Instrument (AAMI) standards. E) Sterilization-relates sterilization procedures and theory including high and low temperature sterilization, sterilization equipment, types of sterilizers, various cycles, quality assurance concepts, documentation, standards, policies and procedures. Lab required. 4 credit hours. (W)

HPRS 1561 Clinical-Health Services/Allied Health/Health Sciences, General

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course is an exploration of teamwork and the application of practical principles in the role of Central Sterile Processing Tech through "hands on" experience. 5 credit hours. (W)

HPRS 2232 Health Care Communications

Methods of communication with clients, client support

groups, healthcare professionals, and external agencies. 2 credit hours. (W)

HPRS 2300 Pharmacology for Health Professions

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: SRGT 1441 and SRGT 1461. Major Requirement: AAS -Surgical Technology. 3 credit hours. (W)

HPRS 2301 Pathophysiology

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. 3 credit hours. (W)

HPRS 2310 Basic Health Profession Skills II

Builds on previously acquired knowledge and skills relevant to the professional development of the student. Lecture and simulated laboratory experiences prepare the student to perform patient care utilizing critical thinking and advanced clinical skills. Lab required. 3 credit hours. (W)

HPRS 2321 Medical Law and Ethics for Health Professionals

Principles, procedures, and regulations governing the legal and ethical relationships among physicians, patients, and health care professionals. Includes current ethical issues related to the various healthcare professions and patient confidentiality. 3 credit hours. (W)

HRPO 1302 Human Resources Training and Development

An overview of human resources training and development as related to organizational mission and goals. Additionally, this course will examine the role of human resource development in maintaining an organization's competitive position in today's environment. Assessment techniques will be identified to assist the manager in determining the general training needs of the organization and the specific needs of the employees. An introduction of practices to help managers successfully transfer training to the workplace to improve organizational efficiency and effectiveness. 3 credit hours. (W)

HRPO 1306 Basic Mediator Training

Topics include history of mediation, Alternative Dispute Resolution legislation in Texas, conflict resolution theory, mediation theory and practice, mediation process and techniques, self-awareness and ethics. When scheduled for 40 or more hours, can be used to meet the standards

for basic mediation training in Texas as established by the Texas Mediation Trainer Roundtable. 3 credit hours. (W)

HRPO 1311 Human Relations

A practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment. Additionally, this course is designed to assist employees and employers in understanding and utilizing human relations concepts as they apply to the business environment. Concepts covered include such areas as morale, personal efficiency, leadership, personality, motivation, and communication. 3 credit hours. (W)

HRPO 1371 Human Resources Intercultural Management

Explores different aspects of intercultural management, including teams, leadership, Human Resource Management, marketing and negotiations. Cross-cultural comparisons of management and communications processes. Emphasizes cultural, ethnic, geographic distinctions and antecedents that affect individual, group, and organizational behavior. 3 credit hours. (W)

HRPO 2301 Human Resources Management

Behavioral and legal approaches to the management of human resources in organizations. 3 credit hours. (W)

HRPO 2303 Employment Practices

A study of employment issues including techniques for human resource forecasting, selection, and placement including interview techniques, pre-employment testing and other predictors. Topics include recruitment methods, the selection process, Equal Employment Opportunity (EEO), EEO recordkeeping, and Affirmative Action Plans. Prerequisite: Departmental Permit. 3 credit hours. (W)

HRPO 2304 Employee Relations

An examination of policies, practices, and issues required to build strong employee relations. Topics include communications, employee conduct rules, performance appraisal methods, Title VII, Family Medical Leave Act, Fair Labor Standards Act, and Americans with Disabilities Act updates. 3 credit hours. (W)

HRPO 2305 Human Resources Information Systems

An introduction to Human Resource information Systems (HRIS). Additionally, this course is designed to provide an introduction to the use of technology in the administration of human resource systems, and how new technologies can contribute significantly to the efficiency in the management of the company's human capital.

Prerequisite/Concurrent Enrollment: BCIS 1305. 3 credit hours. (W)

HRPO 2306 Benefits and Compensation

An overview of employee compensation systems. Topics include compensation systems, direct and indirect compensation, internal and external determination of compensation, benefits administration, managing and evaluating for effectiveness, legal and regulatory issues, pay equity, job analysis affecting job compensation and competencies. 3 credit hours. (W)

HRPO 2307 Organizational Behavior

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. 3 credit hours. (W)

HUMA 1301 Introduction to Humanities I

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course provides a broad overview of cultural traditions and the variety of aesthetic and intellectual works through which they express their values and aspirations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HUMA 1302 Introduction to Humanities II

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course specifically pursues a concentrated exploration of particular cultural traditions or persistent cultural concepts or practices through critical engagement with selected aesthetic and intellectual works. Prerequisite: Meet TSI college-readiness standard for Reading and Writing, or equivalent. 3 credit hours. (A)

HUMA 2323 World Cultures

This course is a general study of diverse world cultures. Topics include cultural practices, social structures, religions, arts, and languages. Prerequisite: Meet TSI college-readiness standard for Reading and Writing, or equivalent. 3 credit hours. (A)

IBUS 1341 Global Supply Chain Management

International purchasing or sourcing. Includes the advantages and the barriers of purchasing internationally, global sourcing, procurement technology, and purchasing processes. Emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total cost

approach, exchange fluctuations, customs procedures, and related topics. 3 credit hours. (W)

IBUS 1354 International Marketing Management

Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international marketing plan. 3 credit hours. (W)

IBUS 2332 Global Business Simulation

A simulation of a global environment. Students will engage in business practice and theory. The simulation may include researching foreign business cultures and importing and exporting products. Emphasizes participation in all business decisions related to running a simulated company. 3 credit hours. (W)

IBUS 2341 Intercultural Management

Cross-cultural comparisons of management and communications processes. Emphasizes cultural ethnic geographic distinctions and antecedents that affect individual, group, and organizational behavior. May include sociocultural demographics, economics, technology, legal issues, negotiations, and processes of decision making in the international cultural environment. 3 credit hours. (W)

IFWA 1310 Nutrition and Menu Planning

Application of principles of nutrition in planning menus for the food service industry. This includes various types of commercial, industrial and institutional food service entities. 3 credit hours. (W)

IFWA 1319 Meat Identifying and Processing

A study of the identification and characteristics of wholesale and retail cuts of meat; hotel, restaurant, and institutional cuts of meat; U.S.D.A quality grades; quality control; and the Federal Meat Inspection Regulation. Lab required. Prerequisites: CHEF 1301, CHEF 1305, and CHEF 2331. 3 credit hours. (W)

IMED 1316 Web Design I

Instruction in web design and related graphic design including mark-up languages, and browser issues. Lab required. Prerequisite: ARTC 1302 and ARTC 1325, or consent of Associate Dean/Director. 3 credit hours. (W)

IMED 1341 Interface Design

Interface design process relative to a project's content and delivery system. Emphasis on Aesthetic usability. Lab required. Prerequisite: ITSE 1311 or consent of Associate Dean/Director. 3 credit hours. (W)

IMED 2311 Portfolio Development

Preparation and enhancement of portfolio to meet professional standards, development of presentation skills, and job-seeking techniques. Lab required.

Prerequisites: UXUI 1371 and consent of Associate Dean/Director. 3 credit hours. (W)

IMED 2315 Web Design II

Mark-up language and advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites, according to World Wide Web Consortium (W3C) standards and legal issues. Lab required. Prerequisite: IMED 1316. 3 credit hours. (W)

INDS 1301 Basic Elements of Design

A study of basic design concepts with projects in shape, line, value, texture, pattern, spatial illusion, and form. Lab required. 3 credit hours. (W)

INDS 1315 Materials, Methods and Estimating

A study of materials, methods of construction and installation, and estimating for interior design applications. Lab required. Prerequisite: INDS 1319 and INDS 2313. 3 credit hours. (W)

INDS 1319 Technical Drawing for Interior Designers

An introduction to reading and preparing technical construction drawings for interior design, including plans, elevations, details, schedules, dimensions and lettering. Lab required. Prerequisite: INDS 1372. 3 credit hours. (W)

INDS 1345 Commercial Design I

A study of design principles applied to furniture layout and space planning for commercial interiors. Lab required. Prerequisites: INDS 1319 and INDS 2313. 3 credit hours. (W)

INDS 1349 Fundamentals of Space Planning

The study of residential and light commercial spaces, including programming, codes, standards, space planning, drawings and presentations. Lab required. 3 credit hours. (W)

INDS 1352 History of Interiors II

A multi-cultural historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time. Lab required. 3 credit hours. (W)

INDS 1372 Computer-Aided Drafting for Interior Designers

An introduction to computer-aided drafting. Emphasis is placed on setup; general knowledge of CAD software; reading basic blueprint; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; and plot/print to scale;

interior furniture layouts. Lab required. 3 credit hours. (W)

INDS 2310 Kitchen and Bath Design

Principles of kitchen and bath design. Emphasizes programming, space planning, and universal design. Includes innovative products and finishes. Lab required. Prerequisites: INDS 1301, INDS 1349, and INDS 1372. 3 credit hours. (W)

INDS 2313 Residential Design I

The study of residential spaces, including the identification of client needs, programming, standards, space planning, drawings, and presentations. Lab required. Prerequisites: INDS 1301, INDS 1349 and INDS 1372. 3 credit hours. (W)

INDS 2317 Rendering Techniques

A study of rendering techniques for formal interior design presentation, using a variety of media. Lab required. Prerequisite: INDS 1319. 3 credit hours. (W)

INDS 2325 Professional Practices for Interior Designers

A study of business practices and procedures for interior designers, including professional ethics, project management, marketing, and legal issues. Lab required. Prerequisites: INDS 1315 and INDS 1345. 3 credit hours. (W)

INDS 2330 Interior Design Building Systems

An overview of building materials, mechanical systems, and construction techniques as applied to interior design. Discussion of codes, project sequencing and the interpretation of detailed working drawings. Lab required. Prerequisites: INDS 1315 and INDS 1345. 3 credit hours. (W)

INDS 2331 Commercial Design II

Advanced concepts of specialized commercial interior design projects, including hospitality, corporate, retail, health care, institutional or other specialized commercial design projects. Lab required. Prerequisite: INDS 1345. 3 credit hours. (W)

INDS 2335 Residential Design II

A comprehensive study of complex residential interior design problems, including advanced space planning, documentation, specifications, budgets, and presentation renderings. Lab required. Prerequisites: INDS 1319, INDS 2310, and INDS 2313. 3 credit hours. (W)

INDS 2337 Portfolio Presentation

A course in the preparation and presentation of a comprehensive interior design portfolio, including resume preparation, employment interview skills, and goal setting.

Lab required. Prerequisites: INDS 2317 and INDS 2325. 3 credit hours. (W)

INDS 2380 Cooperative Education - Interior Design

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

INEW 2330 Comprehensive Software Project: Planning and Design

A comprehensive application of skills learned in previous courses in a simulated workplace. Covers the development, testing, and documenting of a complete software and/or hardware solution. This course may be used as a capstone course for a certificate or degree. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

INEW 2334 Advanced Web Programming

Web programming using industry-standard languages and data stores. Lab required. Prerequisite: ITSE 2302 or consent of Associate Dean/Director. 3 credit hours. (W)

INEW 2340 Object-Oriented Design

A study of large system analysis and design concepts from the object-oriented perspective. Includes determining required objects and their interfaces. Also covers relationships between objects. Lab required. Prerequisite: COSC 1437 or consent of Associate Dean/Director. 3 credit hours. (W)

INRW 0315 Integrated Reading/Writing II

Integration of critical reading and academic writing skills. Successful completion of this course fulfills TSI requirements for reading and/or writing. Additionally, this is a performance-based course designed to develop students' critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. Prerequisite: INRW 0405 or meet TSI standard for INRW 0315; or equivalent. If you do not meet placement requirements, check with the instructor to request consent. 3 credit hours. (D)

INRW 0405 Integrated Reading/Writing I

Integration of critical reading and academic writing skills. Seeks to improve students' academic reading and writing skills through extensive integrated instruction

emphasizing skills and techniques related to vocabulary, grammar, comprehension, paragraph elements, essay structure, and critical analysis that apply to both reading and writing. Students will demonstrate comprehension of varied texts through written responses, progressing from advanced paragraphs to short essays. The required lab component will target students' individual skills. Lab required. Prerequisite: Meet TSI standard for INRW 0405; or equivalent. 4 credit hours. (D)

INSR 1301 Commercial Insurance

Introduction to business loss exposures and the operation of the insurance policies available for these exposures including property, business income, crime, marine, auto, and other government programs. May prepare students to take the licensing exam sponsored by the Texas Department of Insurance. 3 credit hours. (W)

INSR 1305 Personal Insurance

Introduction to personal loss exposures and personal insurance policies for handling these exposures including auto, homeowners, life, health, marine, and various government insurance programs. May prepare students to take the licensing exam sponsored by the Texas Department of Insurance. 3 credit hours. (W)

INSR 1345 Commercial Liability Risk Management and Insurance

Analysis of the major sources of liability loss exposures and examination of the insurance coverage designed to meet those exposures. Commercial liability risk management premises and operations, products and contractual and protective liability, employer liability, and surety bonds. Examination of tort and agency law as they relate to loss exposures involving third party claimants. May prepare students to take the licensing exam sponsored by the Chartered Property/Casualty Underwriters. Prerequisite: INSR 1301. 3 credit hours. (W)

INSR 1351 Essentials of Risk Management

Risk management decision-making process with emphasis on identification and analysis of loss exposures and development of alternative techniques for the treatment of each exposure. 3 credit hours. (W)

INSR 1353 Insurance Operations

Examination of insurance marketing, underwriting, and reinsurance. Topics include rate making, claims adjusting, loss control activities, and other functions and activities. May prepare students to take the licensing exam sponsored by the Chartered Property/Casualty Underwriters. 3 credit hours. (W)

INSR 1355 The Legal Environment of Insurance

Examine related business laws to insurance situations. May prepare students to take the licensing exam

sponsored by the Chartered Property/Casualty Underwriters. 3 credit hours. (W)

INSR 1374 Personal Lines Insurance Underwriting

A study of the underwriting process with an emphasis on the expected financial risk to an insurance organization. Prerequisite: INSR 1305. 3 credit hours. (W)

INSR 1375 Insurance Data Analytics

Exploration of data analytics and how it applies to the insurance industry. 3 credit hours. (W)

INSR 1391 Special Topics in Insurance

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

Topics in Insurance Management

Application of knowledge attained from Insurance courses towards a comprehensive project that identifies an area of improvement or opportunity for the Insurance Industry at large. Prerequisites: INSR 1305 and INSR 1345. 3 credit hours. (W)

INSR 2311 Workers Compensation and Medical Aspects of Claims

The history and rationale for the workers compensation system and the rapidly changing regulatory environment. Topics include the importance of adequate medical knowledge in adjusting claims. 3 credit hours. (W)

INSR 2319 Liability Insurance Claims Adjusting

In-depth study of liability loss adjusting with heavy emphasis on the legal and medical knowledge needed and special skills required to negotiate successfully in a third party claim environment. May prepare students to take the Associate in Claims (AIC) licensing exam. 3 credit hours. (W)

INSR 2340 Multiline Insurance Sales and Marketing

Prospecting and presentation, types of coverage, identifying client needs, terminology, and analyzing homeowners' coverage. Includes information related to sales transitions, analyzing automobile and specialized coverage, tax implications, loss ratios and agent responsibilities. Prerequisite: INSR 1374. 3 credit hours. (W)

INTC 1307 Instrumentation Test Equipment

Theory and application of instrumentation test equipment. Emphasizes accuracy, limitations of instruments, and calibration techniques. Lab required.

Prerequisite: CETT 1409 or consent of Associate Dean/Director. 3 credit hours. (W)

INTC 1357 AC/DC Motor Control

A study of electric motors and motor control devices common to a modern industrial environment. A presentation of motor characteristics with emphasis on starting, speed control, and stopping systems. Lab required. Prerequisite: CETT 1409. 3 credit hours. (W)

INTC 2359 Distributed Control Systems

Theory and application of distributed control systems. Includes hardware, firmware, software, configuration, communications, and networking systems required to implement a distributed control strategy. Lab required. Prerequisite: ELMT 1301. 3 credit hours. (W)

ITAL 1411 Beginning Italian I

Introduction to the basic skills of speaking, reading, writing, and listening. Intended for students with little or no previous training in Italian. Lab required. 4 credit hours. (A)

ITAL 1412 Beginning Italian II

Continuation of ITAL 1411. Lab required. Prerequisite: ITAL 1411 or consent of Associate Dean/Director. 4 credit hours. (A)

ITCC 1314 CCNA 1: Introduction to Networks

This course covers networking architecture, structure, security, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum. Lab required. Prerequisites: CPMT 1305 and ITNW 1358. 3 credit hours. (W)

ITCC 1344 CCNA 2: Switching, Routing, and Wireless Essentials (SRWE)

Describes the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts; provides an in-depth understanding of how routers and switches operate and are implemented in the LAN environment. Lab required. Prerequisite: ITCC 1314. 3 credit hours. (W)

ITCC 2320 CCNA 3: Enterprise Networking, Security, and Automation (ENSA)

Describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. Emphasizes network security concepts and introduces network

virtualization and automation. Lab required. Prerequisite: ITCC 1344. 3 credit hours. (W)

ITCC 2330 CCNP Enterprise: Core Networking (ENCOR)

Provides students with a broad scope of architectural understanding and implementation skills required by enterprise networks. The course covers switching, routing, wireless, and related security topics along with the technologies that support software-defined, programmable networks. Lab required. Prerequisite: ITCC 2320, CCNA Certification, or consent of Associate Dean/Director. 3 credit hours. (W)

ITCC 2335 CCNP Enterprise: Advanced Routing (ENARSI)

Supports the implementation and troubleshooting of advanced routing technologies and services including layer 3 VPN services, infrastructure security and infrastructure services used in enterprise networks. Lab required. Prerequisite: ITCC 2320, CCNA Certification, or consent of Associate Dean/Director. 3 credit hours. (W)

ITMT 1371 Configuring and Supporting Microsoft Windows 10 (MD-100)

Addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows 10 in a variety of stand-alone and network operating system environments. In-depth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows 10. Lab required. Prerequisite: ITNW 1358 or consent of Associate Dean/Director. 3 credit hours. (W)

ITNW 1309 Fundamentals of Cloud Computing

Introduction to cloud computing from a business and technical perspective, including cloud concepts, services, architecture, system integration, connectivity, data center migration, administration, security, compliance and technical support. Coverage includes preparation for industry certifications. Topics may adapt to changes in industry practices. Lab required. Prerequisite: ITCC 1314 or ITNW 1358. 3 credit hours. (W)

ITNW 1336 Cloud Deployment & Infrastructure Management

Focus on Cloud infrastructure, deployment, security models, and key considerations in migrating to Cloud computing. Includes the technologies and processes required to build on-premise and Cloud environments, including computation, storage, networking, virtualization, business continuity, security, and management. Lab required. Prerequisite: ITNW 1373.

ITNW 2375 is strongly recommended. 3 credit hours. (W)

ITNW 1351 Fundamentals of Wireless LANs

Design, plan, implement, operate, and troubleshoot Wireless Local Area Networks (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies. Lab required. 3 credit hours. (W)

ITNW 1354 Implementing and Supporting Servers (Windows Server)

Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment. Additionally, this course provides an introduction to Windows Server 2019. Lab required. Prerequisite: ITNW 1358 or ITCC 1314. 3 credit hours. (W)

ITNW 1358 Network+

Assists individuals in preparing for Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional. Additionally, prepares individuals for a career as a Network Engineer in the Information Technology support industry. Includes the various responsibilities and tasks required for service engineer to successfully perform in a specific environment. Lab required. 3 credit hours. (W)

ITNW 1364 Practicum (or Field Experience) - Computer Systems Networking and Telecommunications

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: ITCC 1344. 3 credit hours. (W)

ITNW 1373 Cloud Storage and Database

Cloud Storage and Database technologies used in cloud computing. Topics include data storage for cloud, mobile, social media, and software. Provides a strong understanding of cloud computing concepts, technology, and architecture in support of storage technologies and prepares students for advanced concepts, technologies, and processes. This course investigates the existing concepts of Cloud Computing from the standpoint of technology resources and an internetworking perspective. The concepts that will be explored involve how Cloud Computing has matured, the growth of Cloud Computing and how the strategies that surround Cloud Computing have added to business agility. The course will study the vastness of Cloud Computing, the services that Cloud Computing offers, and several vendor case studies on

their methodology that drives Cloud Computing. Lab required. Prerequisite: ITNW 1309. 3 credit hours. (W)

ITNW 1374 Cloud Computing Security

Introduction to Cloud Security including tools which monitor data moving to and from the cloud and between cloud platforms, identification of fraudulent use of data in the Cloud and its financial and performance impact. Third-party cloud security solutions including cloud security gateways, centralized cloud management, and native IaaS/PaaS platform security will be presented. Lab required. Prerequisite: ITNW 1309. 3 credit hours. (W)

ITNW 1375 Cloud Administrator I

The Administration I course will be based on learning how to administrate Amazon Web Services. Understand how to administrator the key five pillars supporting Amazon Web Servers, which are Operational Excellence, Security Reliability, Performance Efficiency and Cost Optimization. Lab required. Prerequisite: ITNW 1309. ITSC 1316 is strongly recommended. 3 credit hours. (W)

ITNW 1376 Cloud Administrator II

This course teaches students how to manage their Azure subscriptions, create and scale virtual machines, implement storage solutions, configure virtual networking, back up and share data, connect Azure and on-premises sites, manage network traffic, implement Azure Active Directory, secure identities, and monitor your solution. Lab required. Prerequisite: ITNW 1375. 3 credit hours. (W)

ITNW 1378 Wireless Network Administration

A continuation of the Fundamentals of Wireless LANs class covering radio frequency technologies, antenna concepts, Wireless LAN Hardware and Software, wireless standards, and basic site surveys. Lab required. Prerequisite: ITNW 1351. 3 credit hours. (W)

ITNW 2327 Advanced Cloud Concepts

Focus on enterprise Cloud architecture, with advanced topics including multi-Cloud platforms inclusive of computing, networking, storage, monitoring and database. Lab required. 3 credit hours. (W)

ITNW 2370 Containerization and Micro Services

Skills and knowledge related to Cloud computing architecture and services needed to create, deploy and manage containers will be introduced. Concepts of building blocks, container runtimes, container storage, networking and automation deployment, and orchestration of resources are delivered as skills through labs and lecture. Lab required. Prerequisite: ITSC 1316.

ITNW 2375 is strongly recommended. 3 credit hours. (W)

ITNW 2371 Wireless Network Security

This course covers security concepts and implementations on wireless LAN systems. Course includes wireless LAN discovery, intrusion and attack techniques, protocol analysis, and intrusion prevention. Lab required. Prerequisite: ITNW 1378. 3 credit hours. (W)

ITNW 2372 Wireless Network Design

Focus on enterprise Cloud architecture, with advanced topics including multi-Cloud platforms inclusive of computing, networking, storage, monitoring and database. Lab required. Prerequisite: ITNW 1336 and ITNW 1376. 3 credit hours. (W)

ITNW 2373 Information Storage Management (EMC)

The Information Storage Management course teaches the skills required in designing Storage Systems using Storage Networking Technologies and Virtualization concepts, Business Continuity approaches, and Storage Security and Management strategies. Lab required. Prerequisite: ITNW 1358. 3 credit hours. (W)

ITNW 2374 Emerging Wireless Technology

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lab required. Prerequisite: ITNW 1378. 3 credit hours. (W)

ITNW 2375 VMware vSphere: Installation, Configuration, and Management

A study of Virtualization in computer network technology. The course covers the installation, configuration, and management of VMware vSphere, which consists of VMware vSphere ESXi and VMware vCenter Server. Lab required. Prerequisite: ITCC 1344, or ITNW 1354, or ITSC 1316, or consent of Associate Dean/Director. 3 credit hours. (W)

ITNW 2376 Advanced Topics in Computer Systems Networking and Collaborative Technologies

This course assimilates leading edge skills, knowledge, and advances in technologies relevant to the local industry needs. Lab required. 3 credit hours. (W)

ITNW 2380 Cooperative Education - Computer Systems Networking and Telecommunications

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work

experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

ITSC 1305 Introduction to PC Operating Systems

Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Lab required. 3 credit hours. (W)

ITSC 1309 Integrated Software Applications I-MS Office

Introduction to business productivity software suites using word processing, spreadsheets, databases, and/or presentation software. Lab required. 3 credit hours. (W)

ITSC 1315 IT Project Management

Use of project management tools for developing a project plan including timelines, milestones, scheduling, life cycle phases, management frameworks, skills, and processes. Lab required. 3 credit hours. (W)

ITSC 1316 Linux Installation and Configuration

Introduction to Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Lab required. Prerequisite: ITNW 1358 or consent of the Associate Dean/Director. 3 credit hours. (W)

ITSC 1342 Shell Programming - Scripting

Reading, writing, and debugging shell scripts. Development of scripts to automate frequently executed sequences of commands. Covers conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user. Intended for programmers who are familiar with operating environments and reading and writing various shell scripts. Lab required. Prerequisite: ITNW 1358. 3 credit hours. (W)

ITSC 2325 Advanced Linux (Red Hat RH124)

Provides instruction in advance open-source Linux operating system. Develops directory services for clients, support users remotely, and install and configure network services. Additionally, this is an advanced course in the Linux operating system. The course equips you with Linux administration "survival skills" by focusing on foundational Linux concepts and core tasks. You will learn how to apply command-line concepts and enterprise-level tools, starting you on your journey toward becoming a full-time Linux system administrator. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Lab required.

Prerequisite/Concurrent Enrollment: ITSC 1316 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSC 2339 Personal Computer Help Desk Support

Diagnose and solve user hardware and software related problems with on-the-job and/or simulated projects. Lab required. Prerequisites: ITNW 1358 and ITSC 1305, or consent of Associate Dean/Director. 3 credit hours. (W)

ITSC 2380 Cooperative Education-Computer and Information Sciences, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

ITSE 1301 Web Design Tools

Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on optimization of graphics and images and exploration of the tools available for creating and editing Web documents. Lab required. 3 credit hours. (W)

ITSE 1306 PHP Programming

Introduction to PHP, including the design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Additionally, emphasizes hands-on programming skills necessary to develop secure and reliable PHP based web applications. Lab required. Prerequisites: COSC 1436 and ITSE 1311 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSE 1311 Beginning Web Programming

Skills development in web programming including mark-up and scripting languages. Additionally, the course focuses on use of HTML and CSS to create web sites and includes an introduction to JavaScript. Lab required. 3 credit hours. (W)

ITSE 1330 Introduction to C# Programming

A study of C# syntax including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. Lab required. Prerequisite: COSC 1315 or COSC 1436 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSE 1332 Introduction to Visual Basic.NET Programming

Introduction to Visual Basic.NET (VB.NET) including data types, control structures, functions, syntax, and

semantics of the language, classes, class relationships, and exception handling. Lab required. 3 credit hours. (W)

ITSE 1333 Mobile Applications Development

An overview of different mobile platforms and their development environments. Lab required. Prerequisite: ITSE 2302 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSE 1346 Database Theory and Design

Introduction to the analysis and utilization of data requirements and organization into normalized tables using the normal forms of database design. Additionally, an introduction to relational and non-relational database theory and the practical applications of a contemporary databases. Introduction to the analysis and utilization of data requirements and organization into normalized tables using the normal forms of database design. Topics may adapt to changes in industry practices. Lab required. 3 credit hours. (W)

ITSE 1350 System Analysis and Design

Introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. Lab required. Prerequisite: COSC 1436, ITSE 1330, or ITSE 1359. 3 credit hours. (W)

ITSE 1359 Introduction to Scripting Languages - Python

Introduction to scripting languages including basic data types, control structures, regular expressions, input/output, and textual analysis. Topics may adapt to changes in industry practices. Lab required. 3 credit hours. (W)

ITSE 1380 Cooperative Education -Computer Programming/Programmer, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

ITSE 1393 Special Topics in Computer Systems Analysis

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was

designed to be repeated multiple times to improve student proficiency. Lab required. 3 credit hours. (W)

Business Intelligence

An introduction to Business Intelligence analysis and reporting. The topics of study will include creating a data source, dimensional model, dimensions and measures, attribute relationships and user-defined hierarchies, calculated members, aggregations, and analysis reports using Excel. Prerequisites: ITSE 2309 and ITSW 1304 or consent of Associate Dean/Director.

ITSE 2302 Intermediate Web Programming

Server-side and client-side techniques for Web development. Additionally, students design and implement fully interactive web sites using HTML5, CSS, and JavaScript. Lab required. Prerequisite: ITSE 1311 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSE 2309 Database Programming - SQL

Database development using database programming techniques emphasizing database structures, modeling, and database access. Lab required. 3 credit hours. (W)

ITSE 2313 Web Authoring

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Lab required. Prerequisite: ITSE 1311 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSE 2347 Advanced Database Programming

Database development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access. Additionally, Advanced SQL Query Design, SQL Analytic functions, Database design, and Data Warehousing will be emphasized. Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

ITSE 2353 Advanced C# Programming

C# programming using advanced features of the .NET Framework. Lab required. Prerequisite: ITSE 1311 and ITSE 1330 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSE 2354 Advanced Oracle PL/SQL

Advanced use of Oracle SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation. Prerequisite: ITSE 2309. Lab required. 3 credit hours. (W)

ITSE 2370 Descriptive Analytics

An introduction to principles and techniques in data analysis for problem solving and decision making used in

business and industry. Lab required. Prerequisites: ITSE 2309, ITSW 1304, and MATH 1342. 3 credit hours. (W)

ITSE 2371 Front-End Web Frameworks

Course explores the most common web frameworks used to create interactive and engaging front-end web applications. Students will learn to utilize JavaScript frameworks to develop complex web interfaces. Lab required. Prerequisite: ITSE 2302 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSE 2374 Web Application Development

A comprehensive application of skills learned in previous courses in a simulated workplace. Covers the development, testing, documenting, coding and implementation of a website, web application. This course may be used as a capstone course for a certificate or degree. Lab required. Prerequisite/Concurrent Enrollment: INEW 2334 or ITSE 2313. 3 credit hours. (W)

ITSE 2380 Cooperative Education-Computer Programming/Programmer, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

ITSW 1304 Introduction to Spreadsheets-Excel

Instruction in the concepts, procedures, and application of electronic spreadsheets. Lab required. 3 credit hours. (W)

ITSW 1307 Introduction to Database-Access

Introduction to relational and non-relational database theory and the practical applications of a contemporary database. Topics may adapt to changes in industry practices. Lab required. 3 credit hours. (W)

ITSW 1310 Introduction to Presentation Graphics Software

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. Lab required. 3 credit hours. (W)

ITSW 2334 Advanced Spreadsheets - with Visualization Tools

Advanced techniques for developing and modifying spreadsheets. Includes macros and data analysis functions. Additionally, interpret and present data analytics reports. Use current data visualization tools. Lab

required. Prerequisite: ITSW 1304 or BCIS 1305 or Consent of Associate Dean/Director. 3 credit hours. (W)

ITSW 2370 SAS Programming

Introduction to the principles and techniques of using the SAS Programming Application Language. Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

ITSY 1300 Fundamentals of Information Security

An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed. Lab required. Prerequisite: ITNW 1358. 3 credit hours. (W)

ITSY 1371 OSINT and Introductory Security Analysis

A study of open source and subscription threat intelligence. Includes the role of threat intelligence and organizational incident response. Topics include collection methods, management of operations, classification, production and analysis, assessment of threat vulnerability, business impact analysis, incidence response, and identification of various reporting requirements. The use of link diagrams and various types of association matrices will be introduced and emphasized. Lab required. 3 credit hours. (W)

ITSY 1372 Cyber-Psychology and the Effects of Emerging Technology

Identify effects of psychological phenomena associated with or affected by emerging technology, identify effects on the individual and the combined effects of interpersonal communication in a globally connected ecosystem. Concepts include the application of cyberpsychology through the identification of emotional intelligence and cultural intelligence in a modern environment. Lab required. 3 credit hours. (W)

ITSY 2300 Operating System Security

Safeguard operating systems by demonstrating support skills and designing and implementing security processes. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards. Lab required. Prerequisite: ITNW 1358. 3 credit hours. (W)

ITSY 2301 Firewalls and Network Security Design

Identify elements of secure network design that may include segmentation, Firewall implementation or a combination thereof to mitigate various types of security threats and attacks. Use Best Practices to design, implement, monitor, and manage a network security plan. Examine security incident postmortem reporting and ongoing network security activities. Lab required.

Prerequisite: ITSY 2300 or consent of the Associate Dean/Director. 3 credit hours. (W)

ITSY 2330 Intrusion Detection

Computer information systems security monitoring, intrusion detection, and crisis management. Includes alarm management, signature configuration, sensor configuration, and troubleshooting components. Emphasizes identifying, resolving, and documenting network crises and activating the response team. Lab required. Prerequisite: ITSY 2300. 3 credit hours. (W)

ITSY 2341 Security Management Practices

In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan. Lab required. Prerequisite(s): ITSY 2300 or consent of Associate Dean/Director. ITSY 1300 is strongly recommended. 3 credit hours. (W)

ITSY 2342 Incident Response and Handling

In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures. Lab required. Prerequisite: ITSY 2300 or consent of Associate Dean/Director. 3 credit hours. (W)

ITSY 2343 Computer System Forensics

In-depth study of system forensics including methodologies used for analysis of computer security breaches. Collect document and evaluate evidence to perform postmortem analysis of a security breach. Lab required. Prerequisite: ITSY 2342, or ITSY 2330, or consent of Associate Dean/Director. 3 credit hours. (W)

ITSY 2572 Certified Information Systems Security Professional (CISSP) Common Body of Knowledge Domain Instruct

An in-depth study of the 10 domains which make up the Common Body of Knowledge (CBK) of information security professionals. The course is designed to instruct individuals to implement solid security practices, perform risk analysis, identify necessary countermeasures, and help the enterprise as a whole protect its facility, network, systems, and information. Prerequisites: ITSY 1300 and ITSY 2300, or equivalent experience and consent of the Associate Dean/Director. 5 credit hours. (W)

ITSY 2575 Certified Information Security Manager (CISM)

An in-depth study of the five domains covered on the ISACA* - CISM professional certification exam. Each domain (Information Security Governance, Information

Risk Management, Information Security Program Development, Information Security Program Management, and Incident Management and Response) covers the knowledge and tasks that cybersecurity professionals are expected to know how to perform in the workplace. *Previously known as Information Systems Audit and Control Association. Prerequisite: ITSY 1300, or ITSY 2300, or equivalent experience and consent of Associate Dean/Director. 5 credit hours. (W)

ITSY 2576 EC Council Certified Information Security Officer

An in-depth study of the five domains covered on the EC Council – Certified Chief Information Security Officer (CCISO) exam or EC Council Information Security Manager (EISM) as approved by EC Council. Each domain, [Governance and Risk Management (Policy, Legal, and Compliance)], (Information Security Controls, Compliance, and Audit Management), (Security Program Management and Operations), (Information Security Core Competencies), and (Strategic Planning, Finance, Procurement and Vendor Management), covers the knowledge and tasks that cybersecurity professionals are expected to know how to perform in the workplace. Prerequisites: ITSY1300 and ITSY 2300. 5 credit hours. (W)

JAPN 1411 Beginning Japanese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Japanese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

JAPN 1412 Beginning Japanese II

A continuation of JAPN 1411. Lab required. Prerequisite: JAPN 1411 or consent of Associate Dean/Director. 4 credit hours. (A)

JAPN 2311 Intermediate Japanese I

Continuing development of the four basic skills of speaking, reading, writing, and listening, emphasizing conversational and reading skills. Designed for students who have completed Beginning Japanese II. Additional Kanji structures are introduced. Also includes attention to selected aspects of Japanese culture. Lab required. Prerequisite: JAPN 1412 or consent of Associate Dean/Director. 3 credit hours. (A)

JAPN 2312 Intermediate Japanese II

Continued development of four basic language skills with emphasis on conversation and reading skills. Additional Kanji and grammar structures are introduced. Includes attention to selected aspects of Japanese culture. Lab

required. Prerequisite: JAPN 2311 or consent of Associate Dean/Director. 3 credit hours. (A)

KINE 1100 Beginning Weight Training

Introduction to weight training and body building; learn the basic techniques for strength development and cardiovascular conditioning. Various weight machines, free weights and aerobic machines are used to establish an individual fitness program. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1106 Walking and Fitness

Improve cardiovascular fitness, muscle tone, and flexibility through a vigorous walking and conditioning program. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1111 Beginning Basketball

Develops basic skills and strategies through knowledge of the history, rules, and terminology and through participation in game situations. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1112 Beginning Soccer

Develops the basic skills and strategies through knowledge of the history, rules and terminology and through participation in game situations. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1114 Volleyball

Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1115 Beginning Archery

Investigates the basic techniques, rules and scoring as well as the history and terminology of archery. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1116 Badminton

History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class

competition. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1117 Beginning Tennis

Stresses rules, scoring and fundamental techniques for beginners. Participation by skill level for singles and doubles play is made to ensure vigorous activity for cardiovascular fitness. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1120 Beginning Racquetball

Instruction in rules and basic skills; develops the fundamental techniques of court play for beginners. Participation by skill level assures vigorous activity for cardiovascular fitness. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1123 Beginning Golf

Stresses basic skills, history, terminology and scoring of golf. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1125 Bowling

Teaches ball selection, stance, four-step approach, rules, and scoring procedures. Emphasis on game situations. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1126 Self-Defense

Basic understanding and practical application of fundamental self-defense techniques through physical conditioning. Includes balance, focus, breath control, block and counter, avoiding attack, striking, thrusting and kicking. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1127 Beginning Karate

Introduction to basic techniques, formal exercises, and sparring techniques for the beginner. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1129 Beginning Hatha Yoga

Practice of yogic postures, or "asana," defined as the

physical positioning that coordinates breathing with moving and holding still for the purpose of both stretching and strengthening parts of the body. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1131 Beginning Swimming

Non-swimmers and beginners are taught basic swimming skills and strokes. Emphasizes personal safety skills and confidence in the water. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1136 Water Aerobics

Fitness level is improved through exercises in the water. A non-impact style of exercises that utilizes water resistance for increasing muscular strength, endurance, and cardiovascular fitness. Swimming skills are not necessary. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1137 Swimming Conditioning

Fitness level is improved through swimming strokes and water exercises. Different swimming programs enhance muscular strength, endurance and cardiovascular fitness. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1140 Beginning Aerobic Dance

Aerobic exercise and step training incorporating light weights. Includes interval training, which adds a new variation to aerobic endurance and flexibility. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1142 Varsity Condition I

Presentation of current scientific and technical information related to a particular activity with emphasis on developing health and skill related fitness, as well as fundamental skills. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1144 Varsity Sports I

This course offers development of skills and personal potential for student athletes interested in improving their

performance or preparing for further competition at the upper collegiate level. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1147 Beginning Aerobic Kickboxing/Karate

Cardiovascular and body conditioning are acquired through the use of karate and martial arts techniques set to music and integrating punching bags. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1148 Introduction to Team Sports

Develops the basic skills and strategies through the knowledge of the history, rules, and terminology. Students will participate in game situations. Three of the following activities will be elected for instruction: Basketball, Flag Football, Soccer, Softball, or Volleyball. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

KINE 1164 Introduction to Physical Fitness and Wellness

This course will provide an overview of the lifestyle necessary for fitness and health. Student will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training. Additionally, this course introduces basic concepts of fitness, nutrition, health promotion, and disease prevention. Includes the study and practices of activities and principles that promote fitness and wellness. 1 credit hour. (A)

KINE 1301 Foundations of Kinesiology

The purpose of this course is to provide students with an introduction to human movement that includes the historical development of physical education, exercise science, and sport. This course offers the student both an introduction to the knowledge base, as well as, information on expanding career opportunities. 3 credit hours (A)

KINE 1304 Personal / Community Health

This course provides an introduction to the fundamentals, concepts, strategies, applications, and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to

practice healthy living, promote healthy lifestyles, and enhance individual well-being. 3 credit hours (A)

KINE 1306 First Aid

Instruction and practice for emergency care. Designed to enable students to recognize and avoid hazards within their environment, to render intelligent assistance in case of accident or sudden illness, and to develop skills necessary for the immediate and temporary care of the victim. Successful completion of the course may enable the student to receive a certificate from a nationally recognized agency. 3 credit hours. (A)

KINE 1308 Sports Officiating

The purpose of the course is to study officiating requirements for sports and games with an emphasis on mechanics, rule interpretation, and enforcement. 3 credit hours. (A)

KINE 1336 Introduction to Recreation and Sports Management

Fundamental theory and concepts of recreational and sports activities with emphasis on programs, planning, and leadership. Additionally, the course will introduce basic principles of administration, marketing, management, and operations in relation to the various careers in sports and recreational management. An overview of the sports and recreation industry will be introduced. 3 credit hours. (A)

KINE 1338 Concepts of Physical Fitness

This course is designed to familiarize students with knowledge, understanding and values of health related fitness and its influence on the quality of life emphasizing the development and implementation of fitness programs. Lab required. 3 credit hours. (A)

KINE 2100 Intermediate Weight Training

Designed for the individual who has experience in basic weight training skills and wants to increase their knowledge of training techniques and conditioning. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2106 Beginning Jogging and Fitness

Develops cardiovascular endurance, flexibility and strength through jogging, stretching and weight training. Physical fitness assessment leads to development of an individual fitness program. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2111 Intermediate Basketball

Designed for the individual who has experienced

basketball skills and wants to increase their development and knowledge of basketball. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2112 Intermediate Soccer

Basic skills and techniques are refined beyond the beginner level. Analysis and practice of strategies, safety, offensive and defensive patterns of play and competitive activities are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2115 Intermediate Archery

Investigates intermediate level techniques for refinement of basic archery shooting skills and participation in competitive target shooting. The class is designed to help students learn more advanced techniques in the sport of archery through hands-on application of using the bow and arrow through lecture, demonstration, and practice of archery skills. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2117 Intermediate Tennis

Develops and improves each skill level in serving, forehand and backhand drives, lobs and volleys. Performance strategies for both singles and doubles are drilled. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2120 Intermediate Racquetball

Drills in serving, forehand and backhand drives, kill shots, Z shots and lobs help develop strategies for singles and doubles play. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2129 Intermediate Hatha Yoga

The refinement of the asanas (postures) covered in KINE 1129, with emphasis on breath work. Introduces more advanced asanas; emphasis on integrating yoga into daily routines at home and work. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2139 High Intensity Interval Training

A training technique that involves giving all-out anaerobic

effort (80 - 95% of estimated maximal heart rate) through quick, intense bursts of exercise, followed by short, active rest periods (40 - 50% of estimate maximal heart rate). This type of training allows for a higher post-exercise oxygen consumption, thus using more energy (burning more calories from fat) post-exercise. By utilizing equipment such as medicine balls, kettlebells, jump ropes, dumbbells, stability balls, tension bands, etc., maximum cardiac output and a higher VO2 max can be achieved. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2142 Varsity Condition II

Presentation of current scientific and technical information related to a particular activity with emphasis on developing advanced health and skill related fitness, as well as fundamental skills. Prerequisite: KINE 1142. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2144 Varsity Sports II

This course offers advanced development of skills and personal potential for student athletes interested in improving their performance or preparing for further competition at the upper collegiate level. Prerequisite: KINE 1144. 1 credit hour. (A)

Note: A student may receive up to 4 credit hours of any combination of KINE course numbers in the 2100-2144 range; however, the same course cannot be taken more than twice.

KINE 2356 Care and Prevention of Athletic Injuries

Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, intermediate and long-term care of injuries, and administration procedures in athletic training. 3 credit hours. (A)

LGLA 1303 Legal Research

Presents legal research techniques emphasizing the paralegal's role. 3 credit hours. (W)

LGLA 1305 Legal Writing

Fundamentals of legal writing techniques including case and fact analysis, citation formats, and legal writing styles emphasizing the paralegal's role in legal writing. Prerequisite: LGLA 1370 or consent of Associate Dean/Director. 3 credit hours. (W)

LGLA 1307 Introduction to Law and the Legal Professions

Overview of the law and the legal professions including legal concepts, systems, and terminology; substantive

areas of law and the federal and state judicial systems; ethical obligations and regulations; professional trends and issues with emphasis on the paralegal's role. 3 credit hours. (W)

LGLA 1323 Employment Law

Presents the fundamental concepts of employment law, including employment contracts, at-will employment, governmental regulations, and discrimination issues, emphasizing the paralegal's role in employment law. Prerequisite: LGLA 1307 or consent of Associate Dean/Director. 3 credit hours. (W)

LGLA 1343 Bankruptcy

Fundamental concepts of bankruptcy law and procedure are presented including individual and business liquidation and reorganization with emphasis on the paralegal's role. 3 credit hours. (W)

LGLA 1344 Texas Civil Litigation

Fundamental concepts and procedures of Texas civil litigation including pretrial, trial, and post-trial phases of litigation emphasizing the paralegal's role in the Texas civil litigation process. Prerequisites: LGLA 1303, LGLA 1345, and LGLA 2303, or consent of Associate Dean/Director. 3 credit hours. (W)

LGLA 1345 Civil Litigation

Presents fundamental concepts and procedures of civil litigation including pretrial, trial, and post-trial phases of litigation and emphasizes paralegal's role in civil litigation. 3 credit hours. (W)

LGLA 1351 Contracts

Presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code with emphasis on the paralegal's role in contract law. 3 credit hours. (W)

LGLA 1353 Wills, Trusts, and Probate Administration

Fundamental concepts of the law of wills, trusts, and probate administration emphasizing the paralegal's role. 3 credit hours. (W)

LGLA 1355 Family Law

Fundamental concepts of family law including formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship with emphasis on the paralegal's role in family law. 3 credit hours. (W)

LGLA 1370 Introduction to Legal Conventions

Conventions of legal communication, including grammatical conventions, diction, style, legal citation

form, proofreading skills, and editing skills, with emphasis on the paralegal's role. 3 credit hours. (W)

LGLA 1380 Cooperative Education-Legal Assistant/Paralegal

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean / Director of the program for further information. 3 credit hours. (W)

LGLA 2303 Torts and Personal Injury Law

Fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability are presented with emphasis on the paralegal's role in tort and personal injury law. 3 credit hours. (W)

LGLA 2307 Law Office Management

Fundamental principles and structure of management, administration, and substantive systems in the law office including law practice technology as applied to paralegals. 3 credit hours. (W)

LGLA 2309 Real Property

Presents fundamental concepts of real property law including the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents emphasizing the paralegal's role in real property law. 3 credit hours. (W)

LGLA 2311 Business Organizations

Basic concepts of business organizations including law of agency, sole proprietorships, partnerships, corporations, and other emerging business entities with emphasis on the paralegal's role. Prerequisite: LGLA 1307 or LGLA 2333 or consent of Associate Dean/Director. 3 credit hours. (W)

LGLA 2313 Criminal Law and Procedure

Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system. 3 credit hours. (W)

LGLA 2323 Intellectual Property

Presents the fundamentals of intellectual property law, including creation, procurement, preparation, and filing documents related to patents, copyrights, trademarks, and the processes of intellectual property litigation.

Emphasizes the paralegal's role in intellectual property law. 3 credit hours. (W)

LGLA 2333 Advanced Legal Document Preparation

Use of office technology skills in preparation of legal documents by paralegals based on hypothetical situations drawn from various areas of law. Prerequisite/Concurrent Enrollment: LGLA 1370 or consent of Associate Dean/Director. 3 credit hours. (W)

LGLA 2339 Certified Paralegal Exam Review

A review of the mandatory and optional topics covered in the Certified Paralegal Examination administered by the National Association of Legal Assistants. Prerequisites: LGLA 1305 and LGLA 1345, or consent of Associate Dean/Director. 3 credit hours. (W)

LMGT 1319 Introduction to Business Logistics

A systems approach to managing activities associated with traffic, transportation, inventory management, warehousing, packaging, order processing, and materials handling. 3 credit hours. (W)

LMGT 1325 Warehouse and Distribution Center Management

Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time, and continuous replenishment. 3 credit hours. (W)

LMGT 2330 International Logistics Management

Identification of the principles and practices involved in international distribution systems including the multinational corporation. Attention to global strategic planning, production, supply, manpower/labor, geography, business communications, cultural, political, and legal issues affecting global distribution and firm/host relationships. 3 credit hours. (W)

LMGT 2388 Internship: Logistics and Materials Management

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. 3 credit hours. (W)

MATH 0314 College Algebra Support

This course is a support for students enrolled in College Algebra. It will assist in the study of functions and equations. Prerequisite: TSI Math Assessment score of 910-949 with a diagnostic score of 5, or MATH 0405 with a grade of "C" or better, or equivalent. Corequisite: MATH 1314. 3 credit hours. (D)

MATH 0324 Mathematics for Business and Social Sciences Support

This course is a support for students enrolled in Mathematics for Business and Social Sciences. It will assist in the study of functions and equations. Prerequisite: TSI Math Assessment score of 910-949 with a diagnostic score of 5, or MATH 0405 with a grade of "C" or better, or equivalent. Corequisite: MATH 1324. 3 credit hours. (D)

MATH 0332 Contemporary Mathematics Support

Intended for non-STEM (Science, Technology, Engineering and Mathematics) majors. Concepts and processes that support introductory treatments of sets and logic, financial mathematics, probability and statistics. Development of number sense, proportional reasoning, estimation, technology and communication are supported through this course. Prerequisite: TSI Math Assessment score of 910-949 with a diagnostic score of 5, or MATH 0405 with a grade of "C" or better, or equivalent. Corequisite: MATH 1332. 3 credit hours. (D)

MATH 0342 Elementary Statistical Methods Support

A support course for Elementary Statistical Methods with emphasis on real numbers and graphing techniques in real-world problems. Prerequisite: TSI Math Assessment score of 910-949 with a diagnostic score of 5, or MATH 0405 with a grade of "C" or better, or equivalent. Corequisite: MATH 1342. 3 credit hours. (D)

MATH 0405 Math Foundations

The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. Additionally, an emphasis will be placed on arithmetic operations, number conversions, solving linear equations and inequalities, percent with applications, algebraic expressions, polynomial operations and factoring, graphing linear equations, functions, geometric applications of square roots, an introduction to statistics, and developing critical thinking skills. Lab required. Prerequisite: TSI Math Assessment score of 910-949 with a diagnostic score of 3 or 4, or equivalent. 4 credit hours. (D)

MATH 1314 College Algebra

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator may be required. Lab required. Prerequisite: MATH 0314 with a grade of C or better, or MATH 0324 with a grade of C or better, or meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

MATH 1316 Plane Trigonometry

In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Graphing calculator required. Prerequisite: MATH 1314; or equivalent. 3 credit hours. (A)

MATH 1324 Mathematics for Business and Social Sciences

The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. Graphing calculator required. Lab required. Prerequisite: MATH 0314 with a grade of C or better, or MATH 0324 with a grade of C or better, or meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

MATH 1325 Calculus for Business and Social Sciences

This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I. Graphing calculator required. Lab required. Prerequisite: MATH 1314, or MATH 1324; or equivalent. 3 credit hours. (A)

MATH 1332 Contemporary Mathematics (Quantitative Reasoning)

Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. Additionally, this course is NOT intended to prepare students for calculus, business, or engineering courses. Prerequisite: MATH 0314 with a grade of C or better, or MATH 0324 with a grade of C or better, or MATH 0332 with a grade of C or better, or MATH 0305, or MATH 0406, or meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

MATH 1342 Elementary Statistical Methods

Collection, analysis, presentation and interpretation of data and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals

and hypothesis testing. Use of appropriate technology is recommended. Graphing calculator may be required. Lab required. Prerequisite: MATH 0314 with a grade of C or better, or MATH 0324 with a grade of C or better, or MATH 0342 with a grade of C or better, or MATH 0305, or MATH 0406, or meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

MATH 1350 Mathematics for Teachers I (Fundamentals of Mathematics I)

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314; or equivalent. 3 credit hours. (A)

Note: This course is intended for students pursuing the AAT degree with an emphasis on middle grades 4-8 and early childhood through grade 6.

MATH 1351 Mathematics for Teachers II (Fundamentals of Mathematics II)

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314, or MATH 1350; or equivalent. 3 credit hours. (A)

Note: This course is designed specifically for students who seek middle grade (4 through 8) teacher certification.

MATH 1376 Calculus for Business and Economics II

Continuation of Math 1325. In this course, application of differential equations, functions of several variables, Lagrange Multipliers, Least Squares Modeling, multiple integrals and infinite series will be covered. Basic concepts are related to multivariable calculus. Graphing calculator required. Lab required. Prerequisite: MATH 1325. 3 credit hours. (A)

Note: This course will transfer to a specific 2+2 baccalaureate program. Please check with your advisor to learn whether the course will transfer to the four-year program of your choice. There is an additional fee for this course.

MATH 2305 Discrete Mathematics

A course designed to prepare math, computer science, and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. Topics include: logic, relations, functions, basic set theory, countability and counting arguments, proof techniques, mathematical induction, combinatorics, discrete probability, recursion, sequence and recurrence, elementary number theory, graph theory, and mathematical proof techniques.

Graphing calculator required. Prerequisite: MATH 2413 with a C or better. 3 credit hours. (A)

MATH 2318 Linear Algebra

Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering. Graphing calculator required. Prerequisite: MATH 2414 with a C or better. 3 credit hours. (A)

MATH 2320 Differential Equations

Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems. Graphing calculator required. Lab required. Prerequisite: MATH 2414 with a C or better. 3 credit hours. (A)

MATH 2373 Matrices, Vectors, and Linear Programming

Not for science majors. A study of matrices, vectors, determinants, inverses, system of linear equations, and linear programming with applications. Scientific calculator required. Prerequisite: MATH 1314; or equivalent. 3 credit hours. (A)

Note: This course will transfer to a specific 2+2 baccalaureate program. Please check with your advisor to learn whether the course will transfer to the four-year program of your choice. There is an additional fee for this course.

MATH 2412 Pre-Calculus Math

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Graphing calculator required. Lab required. Prerequisite: MATH 1314 with a C or better; or equivalent preparation. 4 credit hours. (A)

MATH 2413 Calculus I

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas. Graphing calculator required. Lab included. Prerequisite:

MATH 2412 with a C or better; or equivalent preparation. 4 credit hours. (A)

MATH 2414 Calculus II

Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals. Graphing calculator required. Lab included. Prerequisite: MATH 2413 with a C or better. 4 credit hours. (A)

MATH 2415 Calculus III

Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Graphing calculator required. Lab included. Prerequisite: MATH 2414 with a C or better. 4 credit hours. (A)

MDCA 1154 Medical Assisting Credentialing Exam Review

A preparation for one of the National Commission for Certifying Agencies (NCCA) recognized credentialing exams. Prerequisites: HITT 1305, HPRS 2301, HPRS 2321, MDCA 1309, MDCA 1321, MDCA 1417, MDCA 1448, and MDCA 1452. 1 credit hour. (W)

Note: Students who plan to begin the Level 1 Certificate, or the Associate of Applied Science, in Medical Assisting Advanced Practice in Fall 2023 or later should take MDCA 1254 instead of MDCA 1154.

MDCA 1210 Medical Assistant Interpersonal and Communication Skills

Emphasis on the application of basic psychological principles and the study of behavior as they apply to special populations. Topics include procedures for self-understanding and social adaptability in interpersonal communication with patients and co-workers in an ambulatory care setting. 2 credit hours. (W)

MDCA 1254 Medical Assisting Credentialing Exam Review

A preparation for one of the National Commission for Certifying Agencies (NCCA) recognized credentialing exams. Prerequisites: HPRS 2301, HPRS 2321, MDCA 1210, MDCA 1309, MDCA 1321, MDCA 1417, MDCA 1448, and MDCA 1452. 2 credit hours. (W)

MDCA 1309 Anatomy and Physiology for Medical Assistants

Emphasis on structure and function of human cells, tissues, organs, and systems with overview of common pathophysiology. Lab required. 3 credit hours. (W)

MDCA 1321 Administrative Procedures

Medical office procedures including appointment

scheduling, medical records creation and maintenance, interpersonal communications, bookkeeping tasks, coding, billing, collecting, third party reimbursement, credit arrangements, and computer use in the medical office. 3 credit hours. (W)

MDCA 1360 Clinical - Medical/Clinical Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: HPRS 2301, HPRS 2321, MDCA 1210, MDCA 1309, MDCA 1321, MDCA 1417, MDCA 1448, and MDCA 1452. 3 credit hours. (W)

MDCA 1417 Procedures in a Clinical Setting

Emphasis on patient assessment, examination, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, office clinical procedures, and other treatments as appropriate for ambulatory care settings. Lab required. 4 credit hours. (W)

MDCA 1448 Pharmacology & Administration of Medications

Instruction in concepts and application of pharmacological principles. Focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant. Lab required. Prerequisite: MDCA 1417. 4 credit hours. (W)

MDCA 1452 Medical Assistant Laboratory Procedures

Application of governmental health care guidelines. Includes specimen collection and handling, quality assurance and quality control in performance of Clinical Laboratory Improvement Amendments (CLIA)-waived laboratory testing. Lab required. Prerequisite: MDCA 1417. 4 credit hours. (W)

MHSM 3305 Leadership for Healthcare Organizations

The foundation and principles of lean leadership are emphasized, and tools for improved self-understanding of personal leadership styles and their impact on organizational functionality will be introduced. Lab required. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 3310 Legal Issues in Healthcare

This course examines the various federal, state and local laws and regulations affecting health care delivery in the United States. It also covers public and private regulatory agencies, uses associated with professional malpractice, and business liability for health care produced and

services. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 3311 Healthcare Technology Information

This course introduces the different types of information maintained by health care organizations commonly used health care software systems, robotic and automation interfaces, basic healthcare information security system standards, privacy laws and record archival. Lab required. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 3313 Data Analysis and Presentation Development

This course identifies data management strategies and techniques and the development of data-informed decisions. Also included are best practices in creating effective presentations in written and verbal contexts. Lab Required. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 3315 Population Health

Examine various entities whose collaborative efforts contribute to positive health outcomes for a community. Topics include social determinants of health, examination of healthcare costs, healthcare statistics, patient engagement, and impact of patient feedback. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 3320 Fundamentals of Business: Healthcare

This course focuses on the identification of foundational business principles, incorporating analysis of the competitive landscape, marketing and promotion of an organization, accounting principles, and identification of stakeholders. Revenue cycle management will also be addressed. Lab Required. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 3335 Financial Management for Healthcare

This course covers various health care revenue sources, commonly used health accounting software, department budget design, resource allocation, and methods of cost control. Lab required. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 4302 Healthcare Quality and Risk Management

This course focuses on quality measures, patient safety, and risk management issues in healthcare organizations. Additional topics include policies and procedures, compliance, emergency management, and disaster preparedness. Lab required. Prerequisite: Admission to

the Clinical Operations Management program. 3 credit hours.

MHSM 4312 Talent Management in Healthcare

This course focuses on the roles and responsibilities of the supervisor. It encompasses human resource concepts like effective hiring, conflict resolution, employee supervision, performance management, labor law, retention practices, and credentialing. Lab required. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 4315 Project Management

This course provides a foundational understanding of project management. Topics include project scope, cost, quality, communication, risk, and procurement management. Lab required. Prerequisite: Admission to the Clinical Operations Management program. 3 credit hours.

MHSM 4440 Case Analysis in Healthcare Management

This course presents several cases for analysis. Students apply the competencies learned in their healthcare management courses to evaluate these real-world cases. Conversations with healthcare leaders and tours of facilities are also included in this class. Lab required. Prerequisites/Concurrent Enrollment: MHSM 3313, MHSM 4302, MHSM 3335, and MHSM 4312. 4 credit hours.

MILS 1141 Foundations of Leadership

Fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. The study of time management skills, basic drill and ceremony, physical fitness, rappelling, leadership reaction course, first aid, making presentations and marksmanship. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in independent physical fitness training, plus optional participation in a weekend field training exercise. 1 credit hour. (A)

MILS 1142 Introduction to Leadership

Application of principles of leadership through participation in physically and mentally challenging exercises with upper-division ROTC students. Course focuses on communication skills, organizational ethics, and study and time management techniques. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. 1 credit hour. (A)

MILS 1180 Leadership Laboratory

Practical laboratory of applied leadership and skills. Student-planned, -organized and -conducted training, oriented toward leadership development. Laboratory

topics include marksmanship, small unit tactics, multi-tiered programs focused on individual skill levels. Uniform and equipment provided, no fee. May be repeated for credit. 1 credit hour. (A)

MILS 2251 Individual/Team Development

Application of ethics-based leadership skills and fundamentals of ROTC's Leadership Development Program. Develop skills in oral presentations, concise writing, event planning, coordination of group efforts, advanced first aid, land navigation, and military tactics. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. 2 credit hours. (A)

MILS 2252 Individual/Team Military Tactics

Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security, and pre-execution checks. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. 2 credit hours. (A)

MRKG 1301 Customer Relationship Management

General principles of customer relationship management including skills, knowledge, attitudes, and behaviors. 3 credit hours. (W)

MRKG 1311 Principles of Marketing

Introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues. 3 credit hours. (W)

MRKG 2312 e-Commerce Marketing

Explore electronic tools utilized in marketing, focus on marketing communications in developing customer relationships. 3 credit hours. (W)

MRKG 2333 Principles of Selling

Overview of the selling process. Identification of the elements of the communication process between buyers and sellers. Examination of the legal and ethical issues of organizations which affect salespeople. 3 credit hours. (W)

MRKG 2348 Marketing Research and Strategies

Practical experiences in analyzing marketing studies using data-driven decision-making processes. Includes interrelationships among marketing mix. 3 credit hours. (W)

MRKG 2349 Advertising and Sales Promotion

Integrated marketing communications. Includes

advertising principles and practices. Emphasizes multi-media of persuasive communication including buyer behavior, budgeting, and regulatory constraints. 3 credit hours. (W)

MRKG 2371 Strategies in Social Media Marketing

Study of social media networks and their relationships to marketing programs. Explores social media marketing strategies and tactics, along with best practices. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

MRKG 2372 Digital Marketing

Analysis of Digital Marketing and its importance to Integrated Marketing Communications (IMC). Includes exploration of digital marketing strategies. Prerequisite/Concurrent Enrollment: MRKG 2371. 3 credit hours. (W)

MRKG 2373 Digital Marketing Analytics

Analysis and application of Marketing data using a variety of analytics tools. Explores various marketing methods and best practices for achieving digital marketing objectives. Prerequisite: MRKG 2372. 3 credit hours. (W)

MRKG 2381 Cooperative Education-Marketing/Marketing Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

MUAP 1101 Secondary Applied Music-Violin

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1105 Secondary Applied Music-Viola

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in

a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1109 Secondary Applied Music-Cello

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1113 Secondary Applied Music-Double Bass

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1115 Secondary Applied Music-Electric Bass

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1117 Secondary Applied Music-Flute

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission

prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1121 Secondary Applied Music-Oboe

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1125 Secondary Applied Music-Bassoon

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1129 Secondary Applied Music-Clarinet

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1133 Secondary Applied Music-Saxophone

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites:

Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1137 Secondary Applied Music-Trumpet

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1141 Secondary Applied Music-French Horn

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1145 Secondary Applied Music-Trombone

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1149 Secondary Applied Music - Euphonium

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN

class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1153 Secondary Applied Music-Tuba

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1157 Secondary Applied Music-Percussion

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1158 Secondary Applied Music-Drum Set

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1161 Secondary Applied Music-Guitar

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit*

*for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1162 Secondary Applied Music-Jazz Guitar

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1163 Secondary Applied Music-Steel String Guitar

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1165 Secondary Applied Music-Organ

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1169 Secondary Applied Music-Piano

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit*

*for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1170 Secondary Applied Music-Jazz Piano

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1177 Secondary Applied Music-Harp

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1181 Secondary Applied Music-Voice

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses.
This includes MUAP 1101-MUAP 2291.*

MUAP 1187 Secondary Applied Music-Composition

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit*

for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.

MUAP 1188 Secondary Applied Music-Electroacoustic Composition

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1189 Secondary Applied Music-Songwriting

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1190 Secondary Applied Music-Arranging

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.*

MUAP 1191 Secondary Applied Music Conducting

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). 1 credit hour. (A) *Note: Students may receive credit*

for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2291.

MUAP 2201 Concentration Applied Music-Violin

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2205 Concentration Applied Music-Viola

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2209 Concentration Applied Music-Cello

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4

(four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2213 Concentration Applied Music-Double Bass

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2215 Concentration Applied Music-Electric Bass

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering.

Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2217 Concentration Applied Music-Flute

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2221 Concentration Applied Music-Oboe

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any

combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2225 Concentration Applied Music-Bassoon

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2229 Concentration Applied Music-Clarinet

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2233 Concentration Applied Music-Saxophone

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in

1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2237 Concentration Applied Music-Trumpet

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2241 Concentration Applied Music-French Horn

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering.

Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2245 Concentration Applied Music-Trombone

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2249 Concentration Applied Music-Euphonium

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI, or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2253 Concentration Applied Music-Tuba

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2257 Concentration Applied Music-Percussion

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2258 Concentration Applied Music-Drum Set

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-

minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2261 Concentration Applied Music-Guitar

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2262 Concentration Applied Music-Jazz Guitar

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact

the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2263 Concentration Applied Music-Steel String Guitar

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2265 Concentration Applied Music-Organ

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2269 Concentration Applied Music-Piano

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2270 Concentration Applied Music-Jazz Piano

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2277 Concentration Applied Music-Harp

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-

minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2281 Concentration Applied Music-Voice

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2287 Concentration Applied Music-Composition

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact

the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2288 Concentration Applied Music-Electroacoustic Composition

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2289 Concentration Applied Music-Songwriting

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit

hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2290 Concentration Applied Music-Arranging

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUAP 2291 Concentration Applied Music-Conducting

Individual instruction in voice, instrument, composition, or conducting. Additionally, private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. For full-time Music majors only. Contact the Music Department for permission prior to registering. Prerequisite: Audition. Corequisites: Remain enrolled in at least one credit hour of MUEN class(es). Remain enrolled in at least 4 credit hours of Performing Arts classes (Music, Dance, Theatre), including at least one credit hour of MUSB, MUSI or MUSC class(es). Full-time enrollment (12 credit hour minimum) status. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2291.

MUEN 1121 Jazz Lab Band

Examples of major instrumental ensembles may include but are not limited to concert band, marching band,

collaborative piano, jazz band, and orchestra. Additionally, participation in a large band concentrating on jazz and commercial music performance styles. Consisting of 16-21 instrumentalists and one vocalist, the band performs both traditional and contemporary jazz literature. A number of performances both on and off campus are given each semester. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1121 and MUEN 1122 for a combined total of no more than 8 credit hours.

MUEN 1122 Symphonic Wind Ensemble

Examples of major instrumental ensembles may include but are not limited to concert band, marching band, collaborative piano, jazz band, and orchestra. Additionally, study and performance of traditional and contemporary symphonic wind literature. Students participate in weekly rehearsals and perform on scheduled concerts. Basic instrumental proficiency is required. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1121 and MUEN 1122 for a combined total of no more than 8 credit hours.

MUEN 1131 New Music Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, performs experimental, avant garde, electronic, and contemporary music for mixed media ensemble including compositions by student composers. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1132 Keyboard Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, traditional piano literature for multiple performers and arrangements for electronic keyboard ensemble. Several performances each semester. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1133 Woodwind Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of woodwinds performs traditional classical repertoire. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136,

MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1134 Brass Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of brass players perform traditional classical repertoire. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1135 Expressions Combo

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, expressions Combo is a small ensemble (4-6) of musicians who serve as the rhythm section for the Expressions Vocal Jazz ensemble. In addition to rehearsing and performing with Expressions, the combo also prepares its own arrangements and performs as an independent ensemble. Typical repertoire includes bebop, Latin, and fusion standards. This ensemble may have several performances each semester. This group may have an annual tour. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1136 Chamber Ensemble

Example of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Students participate in weekly rehearsals and perform on scheduled concerts. Basic instrumental proficiency is required. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1137 Guitar Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of guitarists performs traditional classical repertoire. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136,

MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1138 Percussion Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of percussion players performs jazz and traditional repertoire. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1139 String Ensemble

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, a small group of string players performs traditional classical repertoire. Lab required. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1140 Jazz Combo

Examples of small instrumental ensembles may include but are not limited to wind, string, percussion, piano, and mixed ensembles in various styles. Additionally, participation in a small jazz ensemble concentrating on jazz and commercial music performance styles. Ensemble consists of 4-9 instrumental/vocal members. Repertoire includes instrumental and vocal music typical of small jazz groups. A number of performances both on and off campus are given each semester. Lab required.

Prerequisite: Audition or consent of Associate Dean/Director. 1 credit hour. (A)

Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1141 Collin Chorale

Any large chorale ensemble. Additionally, this mixed choral ensemble studies and performs a wide variety of music representing the choral literature. This ensemble may have several performances each semester. This group may have an annual tour and open to all interested students. Lab required. Prerequisite: Consent of Associate Dean/Director. 1 credit hour. (A)

Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.

MUEN 1142 Expressions Vocal Jazz Ensemble

Any large choral ensemble. Additionally, this group works on a wide variety of jazz styles throughout the year. They also work in conjunction with a jazz combo allowing

them to experience solo jazz singing. This select ensemble of 10-16 singers has several performances each semester. This group may have an annual tour. Lab required.

Prerequisite: Audition. 1 credit hour. (A)

Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.

MUEN 1151 A Capella Pop Group

Examples of small vocal ensembles may include but are not limited to glee club, madrigals, opera/musical theater, commercial and folk. Additionally, this is a study and performance of accompanied and a cappella vocal music including contemporary pop and jazz repertoire for various sized groups and voice combinations. There may be several performances on and off campus each semester. Lab required. Prerequisite: Audition. 1 credit hour. (A)

Note: Student may take MUEN 1151, MUEN 1152, MUEN 1153, and MUEN 1154 for a combined total of no more than 8 credit hours.

MUEN 1152 Opera Theatre Ensemble

Example of small vocal ensembles may include but are not limited to glee club, madrigals, opera/musical theater, commercial, and folk. Additionally, this is a study of opera through performances of scenes and full productions. Emphasis is placed on the musical and dramatic qualities of performance, preparation of character, and aspects of language diction from the selected production. Lab required. 1 credit hour. (A)

Note: Student may take MUEN 1151, MUEN 1152, MUEN 1153, and MUEN 1154 for a combined total of no more than 8 credit hours.

MUEN 1153 Chamber Choir

Example of small vocal ensembles may include but are not limited to glee club, madrigals, opera/musical theater, commercial, and folk. Additionally, a select audition-only choir devoted to performance of an eclectic repertoire of choral literature for mixed voices (S.A.T.B.). This course will focus on the development of vocal technique, performance practices, and will culminate with several performances throughout the year both on and off campus. This group may have an annual tour. Repertoire consists of advanced collegiate music. Lab required. 1 credit hour. (A)

Note: Student may take MUEN 1151, MUEN 1152, MUEN 1153, and MUEN 1154 for a combined total of no more than 8 credit hours.

MUEN 1154 Musical Theatre Ensemble

Examples of small vocal ensembles may include but are not limited to glee club, madrigals, opera/musical theater, commercial, and folk. Additionally, this is a study of musical theatre through performances of scenes and small-scale productions. Emphasis is placed on the musical and dramatic qualities of performance,

preparation of character, and aspects of language diction from the selected production. Lab required. 1 credit hour.

(A)

Note: Students may take MUEN 1151, MUEN 1152, MUEN 1153, and MUEN 1154 for a combined total of no more than 8 credit hours.

MUSB 1305 Survey of the Music Business

An overview of the music industry including songwriting, live performance, the record industry, music merchandising, contracts and licenses, and career opportunities. 3 credit hours. (W)

MUSB 1341 Concert Promotion and Venue Management

Concert promotion and venue management. Includes considerations in purchasing a club, concert promotion and advertising, talent buying, city codes, insurance, Texas Alcoholic Beverage Commission Regulation, performance rights organization licenses, personnel management and concert production and administration. Lab required. Prerequisite: MUSB 1305. 3 credit hours. (W)

MUSB 2301 Music Marketing

Methods of music distribution, retailing, and wholesaling. Includes identifying a target market, image building, distribution (brick and mortar vs. digital delivery), pricing, advertising, and marketing mix. 3 credit hours. (W)

MUSB 2345 Live Music and Talent Management

An examination of the role, scope, and activities of the talent manager including establishing the artist/manager relationship; planning the artist's career; and developing goals, strategies, and tactics with an overall view of the live music business. Lab required. Prerequisite: MUSB 1305. 3 credit hours. (W)

MUSB 2350 Commercial Music Project

The primary objective of this course is to apply the skills learned in other Commercial Music courses. This is a hands-on project-oriented course aimed at helping students create a portfolio of their work. Artists and their music will be the focus. Each student must design and complete his/her own project with instructor approval. Lab required. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

MUSB 2355 Legal Aspects of the Entertainment Industry

Copyright law and the various agreements used in the entertainment industry. Emphasizes contracts used by music publishers, record companies, artist managers, record producers, film and television producers, and

booking agencies. Prerequisite: MUSB 1305. 3 credit hours. (W)

MUSB 2380 Cooperative Education-Music Management

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

MUSC 1209 Conducting Class

Introduction to the art of conducting including regular and irregular beat patterns, subdivision, and beat pattern varieties applied to musical literature and practical experiences. Lab required. 2 credit hours. (W)

MUSC 1313 Commercial Music Theory I

Introduction to chord progressions, song forms, and harmonic techniques used in commercial music. Topics include modern chord notation and chord voicings. Prerequisite: MUSI 1303. 3 credit hours. (W)

MUSC 1321 Songwriting I

Introduction to the techniques of writing marketable songs including the writing of lyrics and melodies, setting lyrics to music, developing lyrical and musical "hooks," analyzing the marketplace, and developing a production plan for a song demo. 3 credit hours. (W)

MUSC 1323 Audio Electronics

Basic concepts in electricity, Ohm's Law, circuit analysis and troubleshooting. Includes soldering techniques, and equipment maintenance. Lab required. 3 credit hours. (W)

MUSC 1327 Audio Engineering I

The tools, personnel and standard workflow of a recording studio. Topics include fundamentals of sound and overview of tracking, editing, and mixing audio. Lab required. 3 credit hours. (W)

MUSC 1331 MIDI I

Exploration of Musical Instrument Digital Interface (MIDI) systems and applications. Includes the MIDI language and applications in the studio environment using software-based sequencing programs. Lab required. 3 credit hours. (W)

MUSC 1333 Synthesis I

An exploration of sound synthesis. Includes additive,

subtractive, and modulation-based synthesizers. Lab required. 3 credit hours. (W)

MUSC 1405 Live Sound I

An overview of the field of live sound. Includes principles of live sound and the theory and interconnection of the components of a sound reinforcement system. Lab required. Prerequisite: MUSC 1327. 4 credit hours. (W)

MUSC 2313 Commercial Music Theory II

Continuation of Commercial Music Theory I. Emphasizes harmonic and melodic analysis, extended chord theory, and modal and altered scales. Prerequisite: MUSC 1313 or consent of Associate Dean/Director. 3 credit hours. (W)

MUSC 2314 Improvisation Theory I

Chordal structures of commercial music genres. Emphasizes extemporaneous performance. 3 credit hours. (W)

MUSC 2330 Commercial Music Arranging and Composition

Presentation of techniques for arranging and composing projects in the commercial music industry. Lab required. 3 credit hours. (W)

MUSC 2345 Synthesis II

Advanced sound synthesis. Includes hybrid synthesis and digital sampling. Lab required. Prerequisite: MUSC 1333. 3 credit hours. (W)

MUSC 2351 Audio for Video

Advanced audio techniques for video production. Includes synchronization, automated mixdown, audio post production for video, and editing techniques. Lab required. Prerequisite: ARTV 1343 or MUSC 1327. 3 credit hours. (W)

MUSC 2355 MIDI II

Advanced MIDI concepts and techniques. Includes synchronizing MIDI and audio and advanced sequencer operation. Prerequisite: MUSC 1331 with a grade of "C" or better; or consent of Associate Dean/Director. Lab required. 3 credit hours. (W)

MUSC 2356 Songwriting II

Continuation in the development of techniques for writing marketable songs including the writing of lyrics and melodies, setting lyrics to music, developing lyrical and musical "hooks," analyzing the marketplace, and developing a production plan for a song demo. Prerequisite: MUSC 1321, or consent of Associate Dean/Director. 3 credit hours. (W)

MUSC 2403 Live Sound II

Overview of stage monitor systems. Includes monitor

systems set-up and operation and stage management. Also covers interactivity between sound management, performance quality, and audience experience. Lab required. Prerequisite: MUSC 1405. 4 credit hours. (W)

MUSC 2427 Audio Engineering II

Implementation of the recording process, including microphones, audio console, multi-track recorder, and signal processing devices. Lab required. Prerequisite: MUSC 1327 with a grade of "B" or better; or consent of Associate Dean/Director. 4 credit hours. (W)

MUSC 2447 Audio Engineering III

Advanced techniques in recording and manipulation of audio. Includes digital audio editing, recording techniques, and signal processing. Prerequisite: MUSC 2427 with a grade of "B" or better; or consent of Associate Dean/Director. Lab required. 4 credit hours. (W)

MUSC 2448 Audio Engineering IV

Continued enhancement of recording, mixing, arranging, and editing. Includes the role of the producer in session planning, communication, budgeting, business aspects, technical considerations, and music markets. Prerequisite: MUSC 2447 with a grade of "B" or better; or consent of Associate Dean/Director. Lab required. 4 credit hours. (W)

MUSC 2453 Live Sound III

Advanced concepts of live sound engineering for front-of-house mix. Includes techniques required to build and maintain a live sound mix for an audience. Lab required. Prerequisite: MUSC 2403. 4 credit hours. (W)

MUSC 2471 Audio Plugins

Exploration of plugins used in Digital Audio Workstations, with special emphasis on industry standard third-party developers. Lab required. Prerequisite: MUSC 2427. 4 credit hours. (W)

MUSI 1116 Sight Singing & Ear Training I

Singing tonal music in treble and bass clefs, and aural study of elements of music, such as scales, intervals and chords, and dictation of basic rhythm, melody and diatonic harmony. Lab required. 1 credit hour. (A)

MUSI 1117 Sight Singing & Ear Training II

Singing tonal music in various clefs, continued aural study of the elements of music, and dictation of intermediate rhythm, melody and diatonic harmony. Lab required. Prerequisite: MUSI 1116. 1 credit hour. (A)

MUSI 1161 International Phonetic Alphabet (IPA) for singers

A study of the International Phonetic Alphabet (IPA) and

its application to singing in English, Italian, German, and French. 1 credit hour. (A)

MUSI 1181 Piano Class I

Beginning class instruction in the fundamentals of keyboard technique. Additionally, emphasis is given on the practical application of music theory involving harmonization, transposition and related keyboard skills. Lab required. 1 credit hour. (A)

Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

MUSI 1182 Piano Class II

Advanced beginning class instruction in the fundamentals of keyboard technique. Additionally, this is a continuation of MUSI 1181. Development of two-octave minor scales, arpeggios, diatonic chord progressions, and piano repertoire. Lab required. Prerequisite: MUSI 1181. 1 credit hour. (A)

Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

MUSI 1183 Voice Class

Class instruction in the fundamentals of singing including breathing, tone production, and diction. Designed for students with little or no previous voice training. Does not apply to a music major degree. Lab required. 1 credit hour. (A)

MUSI 1192 Guitar Class

Class instruction in the fundamental guitar playing, including technique, music-reading, fretboard theory, melodic and harmonic realizations. Lab required. 1 credit hour. (A)

MUSI 1303 Fundamentals of Music

Introduction to the basic elements of music theory, including scales, intervals, keys, triads, elementary ear training, notation, meter, and rhythm. Course does not apply to a music major degree. 3 credit hours. (A)

MUSI 1306 Music Appreciation

Understanding music through the study of cultural periods, major composers, and musical elements, illustrated with audio recordings and live performances. Course does not apply to a music major degree. Additionally, this course conducts an overview of music history that includes the study of Western art music - the six major eras, composers, their works and musical styles. Emphasis is given to vocabulary and critical listening skills needed to develop an eclectic taste in music. Music Field of Study (FOS) majors must take MUSI 1307.

Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

MUSI 1307 Music Literature

A survey of the styles and forms of music as it developed from the middle ages to the present. This course will familiarize the student with cultural context, terminology, genres, and notation. Additionally, study of selected works in music literature chosen from the six major eras of Western art music history. Includes musical styles, forms, and composers from the Medieval period to the present. Critical listening skills and technical musical terms are emphasized in this course. Required for all Music Field of Study (FOS) majors. 3 credit hours. (A)

MUSI 1310 American Music

A general survey of various styles of music of the Americas, including but not limited to jazz, folk, rock, and contemporary music. Additionally, course does not apply to a Music Field of Study (FOS) major. Music FOS majors must take MUSI 1307. 3 credit hours. (A)

MUSI 1311 Music Theory I

The study of analysis and writing of tonal melody and diatonic harmony, including fundamental music concepts, scales, intervals, chords, 7th chords, and early four-part writing. Analysis of small compositional forms. Optional correlated study at the keyboard. Additionally, investigation of music modes, transposition, cadences and non-harmonic tones, phrase structure, musical textures, and four-part voice leading. 3 credit hours. (A)

MUSI 1312 Music Theory II

The study of analysis and writing of tonal melody and diatonic harmony, including diatonic chords and seventh chords in root position and inversions, non-chord tones, and functional harmony. Introduction to more complex topics, such as modulation, may occur. Optional correlated study at the keyboard. Prerequisite: MUSI 1311. 3 credit hours. (A)

MUSI 2116 Sight Singing & Ear Training III

Singing more difficult tonal music in various clefs, aural study including dictation of more complex rhythm, melody, chromatic harmony, and extended tertian structures. Lab required. Prerequisite: MUSI 1117. 1 credit hour. (A)

Note: Student may take MUSI 2116 and MUSI 2117 for a combined total of no more than 4 credit hours.

MUSI 2117 Sight Singing & Ear Training IV

Singing advanced tonal music and introduction of modal and post-tonal melodies. Aural study including dictation of advanced rhythm, melody, and harmony. Lab required. Prerequisite: MUSI 2116. 1 credit hour. (A)

Note: Student may take MUSI 2116 and MUSI 2117 for a combined total of no more than 4 credit hours.

MUSI 2181 Piano Class III

Intermediate class instruction of keyboard technique. Additionally, this is a continuation of MUSI 1182. Development of three-octave scales and arpeggios, accompaniment patterns, intermediate and 20th century piano repertoire, advanced sight reading skills. Lab required. Prerequisite: MUSI 1182. 1 credit hour. (A)
Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

MUSI 2182 Piano Class IV

Advanced class instruction of keyboard technique. Additionally, this is a continuation of MUSI 2181. Culmination of skills including scales and arpeggios four-octaves hands together, advanced chord progressions, repertoire, and sight reading. Prepares music majors for piano barrier exams. Lab required. Prerequisite: MUSI 2181. 1 credit hour. (A)
Note: Student may take MUSI 1181, MUSI 1182, MUSI 2181, and MUSI 2182 for a combined total of no more than 4 credit hours.

MUSI 2311 Music Theory III

Advanced harmony voice leading, score analysis and writing of more advanced tonal harmony including chromaticism and extended-tertian structures. Optional correlated study at the keyboard. Additionally, study of music theory from late Renaissance polyphony through Baroque counterpoint and continuing with the chromatic harmonies of the Classic period as found within Sonata Allegro and Rondo formal structures. Prerequisite: MUSI 1312. 3 credit hours. (A)

MUSI 2312 Music Theory IV

Continuation of advanced chromaticism and survey of analytical and compositional procedures in post-tonal music. Optional correlated study at the keyboard. Prerequisite: MUSI 2311. 3 credit hours. (A)

MUSI 2389 Academic Co-op Music

An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of music. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

MUSP 1104 Applied Commercial Music: Bass Guitar

Private instruction in bass guitar with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end

of the semester. Prerequisite: Audition and consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1105 Applied Commercial Music: Commercial Guitar

Private instruction in commercial guitar with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1110 Applied Commercial Music: Piano

Private instruction in piano, with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1113 Introductory Group Piano I

Fundamentals of playing various accompaniment patterns with chords. Includes reading standard notation, basic scales, and learning introductory improvisational skills. Lab required. 1 credit hours. (W)

MUSP 1114 Introductory Group Piano II

Continuation of playing various accompaniment patterns with chords. Includes reading standard notation, scales, and learning improvisational skills. Lab required. Prerequisite: MUSP 1113 or consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1117 Applied Commercial Music: Percussion

Private instruction in percussion with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1127 Applied Commercial Music: Voice

Private instruction in voice with goals related to commercial music. Consists of one 100-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Prerequisite: Audition and consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1151 Small Commercial Music Ensemble: Recording

Participation in a small recording ensemble concentrating on commercial music performance styles. Prerequisite:

Audition and consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1153 Small Commercial Music Ensemble: Rock

Participation in a rock ensemble concentrating on commercial music performance styles. Prerequisite: Audition and consent of Associate Dean/Director. 1 credit hour. (W)

MUSP 1202 Introductory Group Voice

Introduction to Speech Level Singing philosophy and technique with goals related to commercial voice. Emphasizes sight singing and harmony singing applicable to commercial background singing. Prerequisite: Audition and consent of Associate Dean/Director. 2 credit hours. (W)

MUSP 2230 Advanced Applied Commercial Music: Voice

Advanced private instruction in voice with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Associate Dean/Director. 2 credit hours. (W)

MUSP 2233 Advanced Applied Commercial Music: Bass Guitar

Advanced private instruction in bass guitar with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Associate Dean/Director. 2 credit hours. (W)

MUSP 2235 Advanced Applied Commercial Music: Piano

Advanced private instruction in piano with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Associate Dean/Director. 2 credit hours. (W)

MUSP 2237 Advanced Applied Commercial Music: Commercial Guitar

Advanced private instruction in commercial guitar with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite:

Audition and consent of Associate Dean/Director. 2 credit hours. (W)

MUSP 2249 Advanced Applied Commercial Music: Percussion

Advanced private instruction in percussion with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Associate Dean/Director. 2 credit hours. (W)

NCBM 004A Mastery Extension for Math Foundations

This Non-Course Based Option is a unique opportunity for students who were unsuccessful in MATH 0405. This option allows students to gain mastery of Math Foundations topics by attending an intensive 2-week session during the Wintermester and Maymester sessions. Prerequisite: To be eligible, students must have taken the final exam and earned a grade of "FD" with an average of 50-69% in MATH 0405 during the prior semester.

NCBM 005A Mastery Extension for Beginning Algebra

This Non-Course Based Option is a unique opportunity for students who were unsuccessful in MATH 0332 or MATH 0342. This option allows students to gain mastery of Beginning Algebra topics by attending an intensive 2-week session during the Wintermester and Maymester sessions. Prerequisite: To be eligible, students must have completed the course and earned a grade of "FD" with an average of 50-69% in MATH 0332 or MATH 0342 during the prior semester.

NCBM 010A Mastery Extension for Intermediate Algebra

This Non-Course Based Option is a unique opportunity for students who were unsuccessful in MATH 0314 or MATH 0324. This option allows students to gain mastery of Intermediate Algebra topics by attending an intensive 2-week session during the Wintermester and Maymester sessions. Prerequisite: To be eligible, students must have taken the final exam and earned a grade of "FD" with an average of 50-69% in MATH 0314 or MATH 0324 during the prior semester.

NUPC 1160 Clinical - Nursing Assistant/Aide and Patient Care Assistant/Aide

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites:

NURA 1301, NURA 1160, DSAE 1340, and PLAB 1323. Corequisite: NUPC 1320. 1 credit hour. (W)

NUPC 1320 Patient Care Technician/Assistant

Training, skills, and knowledge needed to gain employment as a Patient Care Technician in a hospital setting. Lab required. Prerequisites: NURA 1301, NURA 1160, DSAE 1340, and PLAB 1323. 3 credit hours. (W)

NURA 1160 Clinical-Nursing Aide and Patient Care Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite / Concurrent Enrollment: NURA 1301. 1 credit hour. (W)

NURA 1301 Nurse Aide for Health Care

Knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident's rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis is on effective interaction with members of the health care team, restorative services, mental health, and social service's needs. Lab required. 3 credit hours. (W)

NURS 3210 Transitions to the BSN Role

Educational and role development opportunities for nurses will be examined. This course focuses on the baccalaureate-prepared nursing role with emphasis on the following topics: Nursing Theory, Professional Foundations of Practice, Critical Abilities of the Baccalaureate Nurse, Quality and Safety for Individuals, Families, Aggregates and Society, and selected Professional Nursing Concepts. The roles of the baccalaureate-prepared nurses and standards that define professionalism are explored. Prerequisite: Admission to the RN-to-BSN program. 2 credit hours.

NURS 3220 Health Promotion Across Lifespan

The role of the nurse in promoting health and reducing risk behaviors of individuals and families across the lifespan is the focus of this course. Exemplars of nutrition, physical activity and stress management will be examined with an emphasis on the impact of genetics, values, lifestyle, and cultural influences. Client teaching as an essential function of the nurse is emphasized. In the clinical practicum, the student will facilitate his/ her understanding of factors that enhance health promotion and risk reduction through the development of a long-term relationship with a client and family. Prerequisite: Admission to the RN-to-BSN program. 2 credit hours.

NURS 3330 Ethics in Health Care

This course builds on the ethical and legal foundations for professional nursing practice and health care services.

Ethical, legal, and moral/social principles along with the ANA Code for Nurses are applied to selected common and complex health care related situations. The role of ethics in the development of professionalism and professional values is explored. Prerequisite: Admission to the RN-to-BSN program. 3 credit hours.

NURS 3340 Population-focused Community Health I

Introduces the concept of the community of persons/patients, families, and populations as the adult and geriatric patient in the healthcare system and the roles of the nurse in community services. Nurse roles include public policy, provision of primary care, prevention of disease or health risk, education and health promotion, and restoration. Prerequisite: Admission to the RN-to-BSN program. 3 credit hours.

NURS 3350 Advanced Health Assessment

An in-depth coverage of a comprehensive health assessment with an emphasis on health promotion and how this concept is applied within nursing practice. This course focuses on the techniques of data collection and physical assessment and applying these across the lifespan and in a variety of diverse population groups and populations. This course lends itself to a concept-based approach. Prerequisite: Admission to the RN-to-BSN program. 3 credit hours.

NURS 3450 Advanced Health Assessment / Clinical

An in-depth coverage of a comprehensive health assessment with an emphasis on health promotion and how this concept is applied within nursing practice. This course focuses on the techniques of data collection and physical assessment and applying these across the lifespan and in a variety of diverse population groups and populations. This course lends itself to a concept-based approach. Clinical/Lab required. Prerequisite: Admission to the RN-to-BSN program. 4 credit hours.

NURS 4115 Healthcare Organization

This course explores the U.S. health care delivery organizations and payment systems. Perspectives of providers, institutions, insurers, and health care workers are described. The role of information in the continuity of care among institutions and inter-disciplinary care teams is articulated. The electronic information infrastructure is examined with implications for nursing practice. Prerequisite: Admission to the RN-to-BSN program. 1 credit hour.

NURS 4225 Nursing Informatics

This course explores evidence-based research and practice through health care informatics. Includes informatics theories, networks, skills, technology, system implementation, and management of data bases. The role of information in the continuity of care among

institutions and inter-disciplinary care teams is articulated. The electronic information infrastructure, including telehealth and individually-customized health care, is examined with implications for nursing practice. Prerequisite: Admission to the RN-to-BSN program. 2 credit hours.

NURS 4235 Health Care Quality

Provides a multidisciplinary background in the science of healthcare quality management. Students will learn to develop and plan for execution of quality improvement plans, using a quality indicator assessment program, as the framework to develop a paper that identifies quality indicators, their measurements and nursing interventions to improve the quality measurement. Valued-based purchasing will be defined and interventions to assure quality and cost containment will be discussed. Prerequisite: Admission to the RN-to-BSN program. 2 credit hours.

NURS 4345 Population-focused Community Health II

Introduces the concept of the community of persons/patients, families, and populations as the maternal and pediatric patient in the healthcare system and the roles of the nurse in community services. Nurse roles include public policy, provision of primary care, prevention of disease or health risk, education and health promotion, and restoration. Prerequisite: Admission to the RN-to-BSN program. 3 credit hours.

NURS 4354 Professional Project

This course requires the registered nurse to synthesize knowledge acquired in the RN-BSN curriculum toward the development of the Professional Nursing role. Integrated content expectations are evolving issues, lifelong learning, impact of cultural issues, and promotion of the nursing profession. Practicum project required. Prerequisite: Admission to the RN-to-BSN program and Associate Dean/Director approval required. 3 credit hours.

NURS 4355 Research and Evidence-based Practice

This course provides a beginning foundation for the use of research in practice through a synthesis of introductory research knowledge with emphasis on writing, and scholarly exchange. The knowledge gained in this course prepares the student to understand the language of research and the scientific process. This course will prepare the student to understand the steps of the evidenced-based practice process and identify various EBP models to translate evidence into practice. The topics of articulating the clinical questions, using electronic databases to locate evidence, evaluating levels of evidence, and critically appraising the evidence to translate into the best evidence will be explored. Ethical issues in research and evidence-based practice will be

discussed. The course focuses on enhancing the student's ability to read, comprehend, critically appraise, and apply the best evidence to the professional practice of nursing. Prerequisite: Admission to the RN-to-BSN program. 3 credit hours.

NURS 4365 Leadership and Management

This course emphasizes leadership and management theories in communication and conflict resolution, budgeting, human resource management, quality and safety, risk management, change, delegation, decision making, and current issues and trends. Prerequisite: Admission to the RN-to-BSN program. 3 credit hours.

NURS 4465 Leadership and Management / Clinical

This course emphasizes leadership and management theories in communication and conflict resolution, budgeting, human resource management, quality and safety, risk management, change, delegation, decision making, and current issues and trends. Clinical experiences focus on management of issues and interactive observation of leaders and managers in a variety of settings. Prerequisite: Admission to the RN-to-BSN program. 4 credit hours.

OSHT 1305 OSHA Regulations - Construction Industry

A study of Occupational Safety and Health Administration (OSHA) regulations pertinent to the construction industry. Lab required. 3 credit hours. (W)

OSHT 1307 Construction Site Safety and Health

Introduction to safety requirements for construction sites including occupational health and environmental controls. Lab required. 3 credit hours. (W)

OSHT 1309 Physical Hazards Control

A study of the physical hazards in industry and the methods of workplace design and redesign to control these hazards. Emphasis on the regulation codes and standards associated with the control of physical hazards. Lab required. Prerequisite: OSHT 1307. 3 credit hours. (W)

OSHT 1313 Accident Prevention, Inspection, and Investigation

Provides a basis for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, inspection techniques, and accident investigation analysis. Lab required. 3 credit hours. (W)

OSHT 1316 Material Handling

Proper methods for material handling and storage including safety practices, proper equipment usage,

engineering controls, and personal protective equipment. Lab required. 3 credit hours. (W)

OSHT 2309 Safety Program Management

Examine the major safety management issues that affect the workplace including safety awareness, loss control, regulatory issues, and human behavior modification. Lab required. Prerequisite: OSHT 1307. 3 credit hours. (W)

OSHT 2310 Principles of Safety Engineering

Methods to predict, eliminate, or reduce unsafe conditions at the design and construction stage utilizing engineering controls. Includes methods of analysis, prioritization, and implementation of control measures for potentially hazardous situations in the workplace. Lab required. Prerequisite: OSHT 1307. 3 credit hours. (W)

OSHT 2320 Safety Training Presentation Techniques

Principles of developing and presenting effective industrial/business training. Emphasis on instructor qualifications and responsibilities, principles of teaching including use of teaching aids and presentation skills. Lab required. Prerequisite: OSHT 1313. 3 credit hours. (W)

OSHT 2337 Advanced Risk Management

An exploration of safety management systems such as OSHAS, ANSI, and ISO. OSHAS Guidelines for Implementation; Risk Manager Standards Vocabulary for Risk Management Principles and Risk Assessment Techniques. The FAA Safety Management Systems and other similar programs. Lab required. Prerequisite: OSHT 1309. 3 credit hours. (W)

OSHT 2380 Cooperative Education - Occupational Safety and Health Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisite: Departmental Permit. 3 credit hours. (W)

PFPB 1306 Basic Blueprint Reading for Plumbers

Introduction to reading and interpreting working drawings. Includes symbols and abbreviations and the use of sketching techniques to create isometric and orthographic drawings of drain, waste, vent, hot and cold water, and gas piping components. Lab required. 3 credit hours. (W)

PFPB 1321 Plumbing Maintenance and Repair

Instruction in the practices and procedures employed by a

plumber including public relations. Lab required. 3 credit hours. (W)

PFPB 1323 Plumbing Codes I

State and local plumbing codes and the application of potable water, waste water, and gas systems relating to residential and light commercial settings. Lab required. 3 credit hours. (W)

PFPB 1347 Backflow Prevention

Principles, practices, and regulations of backflow. Includes backpressure, public health, laws and responsibilities, mechanics and use of backflow devices, and equipment testing used in backflow devices. Lab required. Prerequisites: PFPB 1321 and PFPB 1350. 3 credit hours. (W)

PFPB 1350 Plumbing and Pipefitting Equipment and Safety

Safe use of hand tools, power tools, rigging, and power equipment used in the plumbing trade for installation of different plumbing systems. Lab required. 3 credit hours. (W)

PFPB 1371 Plumbing Fundamentals

Introduction to the basic principles of plumbing. Topics include drains, vents, water lines, gas lines and plumbing fixtures. Note: This course is designed for non-plumbing majors. Lab required. 3 credit hours. (W)

PFPB 2308 Piping Standards and Materials

Identification, description, and application of piping standards and specifications. Includes identification and use of various metallic and non-metallic piping materials, identification and installation of valves, and material take-offs. Lab required. Prerequisite: PFPB 1321. 3 credit hours. (W)

PFPB 2309 Residential Construction Plumbing I

Skill development in the procedures and techniques employed by a plumber in the rough-in and top-out stages of a new home or the remodeling of an older home. Lab required. Prerequisites/Concurrent Enrollment: PFPB 1321 and PFPB 1350. 3 credit hours. (W)

PFPB 2336 Commercial Construction and Fixture Setting

Practices and procedures employed by a plumber in the common construction in a commercial building including drain, waste, and vent systems, water systems, and fixture installations. Lab required. Prerequisites: PFPB 1321 and PFPB 1350. 3 credit hours. (W)

PFPB 2349 Field Measuring, Sketching, and Layout

Field dimensioning, measuring, sketching, and layout of

future process piping and the use, care, and setup of transit and level. Lab required. 3 credit hours. (W)

PFPB 2371 Advanced Plumbing Practices

Introduction to and familiarization with water pressure booster and recirculation systems, indirect and special wastes, hydronic and solar heating systems, private water well systems, private waste disposal systems, swimming pools and hot tubs, plumbing for mobile homes and travel trailer parks, and introduction to medical gas and vacuum systems. Lab required. Prerequisites: PFPB 1323, PFPB 1350, and PFPB 2349. 3 credit hours. (W)

PHIL 1301 Introduction to Philosophy

A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications. Additionally, texts studied will be from ancient, medieval, and modern sources. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 1304 Introduction to World Religions

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2303 Introduction to Formal Logic

The purpose of the course is to introduce the student to symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2306 Introduction to Ethics

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2307 Introduction to Social and Political Philosophy

A study of major issues in social and political theory and/or the work of major philosophical figures in this area. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2321 Philosophy of Religion

A study of the major issues in the philosophy of religion such as the existence and nature of God, the relationships between faith and reason, the nature of religious language, religious experience, and the problem of evil. Prerequisite:

Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHRA 1102 Pharmacy Law

Overview of federal and state laws governing the practice of pharmacy. The role of the pharmacy technician and the pharmacist and their associated responsibilities. Includes Code of Ethics, patient confidentiality, and a comparison of legal and ethical aspects. 1 credit hour. (W)

PHRA 1160 Clinical - Pharmacy Technician/Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

PHRA 1201 Introduction to Pharmacy

An overview of the qualifications, operational guidelines, and job duties of a pharmacy technician. 2 credit hours. (W)

PHRA 1205 Drug Classification

A study of pharmaceutical drugs, abbreviations, classifications, dosages, side effects, and routes of administration. Lab required. 2 credit hours. (W)

PHRA 1209 Pharmaceutical Mathematics I

Solving pharmaceutical calculation problems encountered in the preparation and distribution of drugs. Lab required. 2 credit hours. (W)

PHRA 1243 Pharmacy Technician Certification Review

A review of major topics covered on the national Pharmacy Technician Certification Examination (PTCE). 2 credit hours. (W)

PHRA 1260 Clinical - Pharmacy Technician/Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2 credit hours. (W)

PHRA 1313 Community Pharmacy Practice

Introduction to the skills necessary to process, prepare, label, and maintain records of prescriptions in a community pharmacy to include customer service, count and pour techniques, prescription calculations, drug selection and preparation, over-the-counter drugs, inventory management and legal parameters. Lab required. Prerequisite/Concurrent Enrollment: PHRA 1209. 3 credit hours. (W)

PHRA 1347 Pharmaceutical Mathematics II

Advanced concepts of Pharmaceutical Mathematics. Lab

required. Prerequisite/Concurrent Enrollment: PHRA 1209. 3 credit hours. (W)

PHRA 1349 Institutional Pharmacy Practice

Fundamentals of the diverse roles and practice of pharmacy technicians in an institutional pharmacy setting. In-depth coverage of hospital pharmacy organization, work flow and personnel, safety techniques, data entry, packaging and labeling operations, inpatient drug distribution systems including investigational drugs, continuous quality improvement and inventory control. Lab required. Prerequisite/Concurrent Enrollment: PHRA 1209. 3 credit hours. (W)

PHRA 1441 Pharmacy Drug Therapy and Treatment

Study of therapeutic agents, their classifications, properties, actions, and effects on the human body and their role in the management of disease. Lab required. Prerequisites: PHRA 1313 and PHRA 1349. 4 credit hours. (W)

PHRA 1445 Compounding Sterile Preparations

The process of compounding sterile preparations and aseptic technique within legal and regulatory guidelines specified by USP <797> standards. Lab required. Prerequisites: PHRA 1209 and PHRA 1349. 4 credit hours. (W)

PHTC 1300 Photo Digital Imaging I

An introduction to computer and software instruction for imaging. Includes color, gray scale, image conversion, presentation, and ethics. Lab required. Prerequisite: PHTC 1311. 3 credit hours. (W)

PHTC 1311 Fundamentals of Photography/Digital

An introduction to camera operation and image production, composition, correct exposure and proper lighting. Lab required. 3 credit hours. (W)

PHTC 1341 Color Photography I

Examination of color theory as it applies to photography. Emphasis on color concepts and the intricacies of seeing and photographing in color. Lab required. Prerequisite: PHTC 1311. 3 credit hours. (W)

PHTC 1343 Expressive Photography

A study of formal, professional, and individual uses of photography by applying photographic technology to personalized needs. Emphasis on creative visual thinking and problem solving and the exploration of personal vision. Lab required. 3 credit hours. (W)

PHTC 1345 Illustrative Photography I

Instruction in the technical aspects involved in commercial photography. Topics include lighting equipment, techniques of production photography, reproduction principles, illustrative techniques, and

advertising. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

PHTC 1347 Landscape Photography

Skill development in the inspection of the landscape visually and photographically utilizing various camera formats. Topics include exploration of historic, geographical, and cultural locations, and review of landscape photographers. Lab required. Prerequisite: ARTS 2348 or ARTS 2356 or PHTC 1311. 3 credit hours. (W)

PHTC 1351 Photojournalism I

Presentation of photographic techniques used by photojournalists in newspapers, magazines, trade publications and digital media to include news, feature, sports, editorial portraits, and photo essays. Includes a study of layout design and the freelance market. Lab required. Prerequisite: PHTC 1311. 3 credit hours. (W)

PHTC 1353 Portraiture I

Skill development in the photographic principles of portrait lighting, posing, and subject rapport. This is a foundation course in photographic portraiture. Assignments are designed to provide both aesthetic challenges as well as comprehensive studio technique. All students must participate in class demos and stick close to prescribed procedures on assignments in order to maintain studio privileges. There will be a mixture of color and black and white materials used, with accent on studio time rather than darkroom or computer time. Lab required. Prerequisite: PHTC 1311. 3 credit hours. (W)

PHTC 1371 Book, Design, and Presentation

Structure and creation of promotional material and one-of-a-kind material, with emphasis on composition and design elements. Lab required. 3 credit hours. (W)

PHTC 2308 Wedding Photography

Introduction to the processes and concepts of photographing a wedding to include booking, photographing, and post-production. Lab required. Prerequisites: PHTC 1300, and PHTC 2353 or PHTC 1351. 3 credit hours. (W)

PHTC 2331 Architectural Photography

Study of the equipment, processes, and procedures necessary for the photography of building exteriors and interiors, dusk/night and night architectural landscapes, and construction progress. Lab required. Prerequisite: PHTC 1311. 3 credit hours. (W)

PHTC 2340 Photographic Studio Management

In-depth study of photography business management, pricing, market analysis, promotion, networking, job acquisition, and photographic equipment analysis. Lab

required. Prerequisite: PHTC 2349 or PHTC 2353. 3 credit hours. (W)

PHTC 2342 Fashion Photography

Skill development in fashion photography in terms of trends and techniques included in studio and location work. Emphasizes model direction and lighting control. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

PHTC 2343 Portfolio Development

A culmination experience for the evaluation of the student's photographic competencies. Includes association with a professional photographic organization, completion of portfolio, professional self-presentation, comprehensive exam, and seminars in areas of photographic interest. Prerequisite: Consent of Associate Dean/Director. Lab required. 3 credit hours. (W)

PHTC 2349 Photo Digital Imaging II

Advanced concepts in the use of the computer and software for photographic manipulation and output. Lab required. Prerequisite: PHTC 1300. 3 credit hours. (W)

PHTC 2353 Portraiture II

Advanced concepts in the study of principles of effective portraiture with specific emphasis on unique presentation and environmental and location studies. Lab required. Prerequisite: PHTC 1353. 3 credit hours. (W)

PHTC 2371 Video Production for Photographers

This is a foundation course in professional video production for photographers, including video capture, editing, sound recording, color grading, and delivery. Lab required. Prerequisite: PHTC 1311. 3 credit hours. (W)

PHTC 2380 Cooperative Education - Commercial Photography

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

PHYS 1401 College Physics I

Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical

mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving. Lab required. Prerequisites: MATH 1314, and either MATH 1316 or MATH 2412. 4 credit hours. (A)

PHYS 1402 College Physics II

Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab required. Prerequisite: PHYS 1401 in the last five years with a grade of C or better. 4 credit hours. (A)

PHYS 1403 Stars and Galaxies

Introduction to stars and galaxies; basic tools and concepts in astronomy and physics are discussed. Subjects studied include stellar evolution, supernovae, black holes, neutron stars, galaxies, and quasars. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

PHYS 1404 Solar System

Introduction to the solar system; basic tools and concepts in astronomy and physics are discussed. Subjects studied include planets, moons, asteroids, comets, solar system formation, and solar system exploration. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

PHYS 1405 Elementary Physics I - Conceptual Physics

This course presents concepts of classical and modern physics with application to biology and health sciences. What students should bring to this course is curiosity about how the world works. Intended for liberal arts, health science, or any majors. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5,

and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

PHYS 1410 Physics of Music and Sound

This course is a study of the physics governing production, transmission and perception of sound. The focus is on the physical characteristics of sound, as well as the basic physical relationships that govern all vibrations and waves. We will also consider how sound is affected by the environment (acoustics) and how sound is physically and physiologically perceived. Laboratory exercises and classroom demonstrations combine to enhance lecture material. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

PHYS 1415 Physical Science I

Investigation of everyday phenomena of the physical world, which helps students to achieve a well-grounded understanding of selected science concepts as well as the skills that enable and encourage rational independent thinking. Lab required. Prerequisites: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

PHYS 1417 Physical Science II

Investigation of topics in physics, chemistry, geology, and meteorology in the context of a one-semester astronomy course. Topics will include: Celestial measurement of time, calendars, and seasons; geology and meteorology of the Earth, Moon, and planets; Chemistry and physics of stars and galaxies; and the interdisciplinary question of life beyond Earth. Laboratory exercises and night observations combine to enhance lecture material. Lab required. Prerequisite: TSI Math score of 910-949 with a diagnostic score of 5, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

PHYS 2389 Academic Co-op Physics

Integrates on-campus study with practical hands-on work experience in physics. In conjunction with class seminars, the student will set specific goals and objectives in the study of physics. Contact the Associate Dean/Director for more information. 3 credit hours. (A)

PHYS 2425 University Physics I

Lecture: Fundamental principles of physics, using calculus for science, computer science, and engineering majors; the principles and applications of classical and modern mechanics, including harmonic motion and physical systems, and the laws of thermodynamics; and emphasis on problem solving. Lab: Basic laboratory experiments supporting theoretical principles presented in the lecture section involving the principles and applications of classical mechanics, including harmonic motion and

physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisite: MATH 2413 equivalent within the last five years with a grade of "C" or better.

Prerequisite/Concurrent enrollment: MATH 2414 equivalent. 4 credit hours. (A)

PHYS 2426 University Physics II

Lecture: Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics, and modern physics. Lab: Laboratory experiments supporting theoretical principles presented in the lecture section involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisites: MATH 2414 equivalent, and PHYS 2425 within the last five years with a grade of "C" or better. 4 credit hours. (A)

PLAB 1260 Clinical - Phlebotomy

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Department Permit. 2 credit hours. (W)

PLAB 1323 Phlebotomy

Skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children, and infants. Emphasis on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. Lab required. 3 credit hours. (W)

POFI 2301 Word Processing-MS Word

Word processing software focusing on business applications. Lab required. Prerequisite/ Concurrent enrollment: POFT 1329. 3 credit hours. (W)

POFI 2331 Desktop Publishing for the Office-MS Office

In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications. Lab required. Prerequisite: POFI 2301. 3 credit hours. (W)

POFT 1307 Proofreading and Editing

Instruction in proofreading and editing skills necessary to

assure accuracy in business documents. Lab required. 3 credit hours. (W)

POFT 1319 Records and Information Management I

Introduction to basic records information management systems including manual and electronic filing. Lab required. 3 credit hours. (W)

POFT 1329 Beginning Keyboarding

Skill development of keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. 3 credit hours. (W)

POFT 1349 Administrative Office Procedures II

In-depth coverage of office procedures with emphasis on decision-making, goal setting, management theories, and critical thinking. To be completed during the last semester of the Business Office Support Systems degree or certificate. Lab required. Prerequisites: ITSC 1309, POFI 2301, POFT 1307, and POFT 1319. 3 credit hours. (W)

POFT 1380 Cooperative Education-Administrative Assistant and Secretarial Science, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

POFT 2312 Business Correspondence and Communication

Development of writing and presentation skills to produce effective business communications. Lab required. 3 credit hours. (W)

POFT 2331 Administrative Project Solutions

Advanced concepts of project management and office procedures integrating software applications, critical thinking, and problem-solving skills. 3 credit hours. (W)

POFT 2371 Strategies in Social Media

This course focuses on creating professional business presence by using current social media applications. Topics will include strategies, effective communication, networking, audience engagement, best practices and using social media apps to communicate, engage, and market to business customers and stakeholders. 3 credit hours. (W)

PSGT 1205 Neurophysiology of Sleep

Review of the human central nervous system as related to sleep. Emphasis on associated wave patterns and collection and utilization of sleep histories. Major

Requirement: AAS - Polysomnographic Technology. 2 credit hours. (W)

PSGT 1215 Introduction to Polysomnography

Introduction to the history of sleep medicine and the role of the technologist in current practice settings. Lab required. 2 credit hours. (W)

PSGT 1260 Certificate Clinical I-Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admitted to the Certificate -Polysomnographic Technology Program. Corequisite: PSGT 1400. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 1310 Neuroanatomy and Physiology

Basic neuroanatomy and physiology. Includes neurologic history, neurologic exam, and diagnostic tools applied to the study of various neurologic disorders. 3 credit hours. (W)

PSGT 1340 Sleep Disorders

Disorders that affect sleep. Includes insomnia, circadian rhythm disorders, narcolepsy, sleep disordered breathing, REM Behavior, movement and neuromuscular disorders, medical, and psychiatric. Prerequisite: PSGT 1310. Major Requirement: AAS or Certificate - Polysomnographic Technology. 3 credit hours. (W)

PSGT 1360 AAS Clinical I-Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1400. Major Requirement: AAS-Polysomnographic Technology. 3 credit hours. (W)

PSGT 1400 Polysomnography I

Introduction to polysomnographic technology. Includes terminology, instrumentation, patient safety, infection control, recording and monitoring techniques, documentation, professional issues, and patient-technologist interactions. Lab required. Major Requirement: AAS or Certificate - Polysomnographic Technology. 4 credit hours. (W)

PSGT 2205 Sleep Scoring and Staging

Development of skills for sleep scoring, staging, and record preparation. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 2250 Infant and Pediatric Polysomnography

Sleep physiology and the normal sleep patterns of the

infant and pediatric population. Includes opportunities to perform a pediatric study. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 2260 Certificate Clinical II - Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1260. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 2271 Pharmacology for Polysomnography

Discusses the basic principles of pharmacology and the clinical and pharmacological treatment of sleep disorders. Addresses the use of sleep medication in children, adolescents, and the elderly. Examines the administration, mode of action, and the physiological effects of pharmacological agents on sleep. Prerequisite: PSGT 1205. Major Requirement: AAS - Polysomnographic Technology. 2 credit hours. (W)

PSGT 2272 Polysomnography Exam Preparation

Comprehensive review to optimize polysomnography credentialing exam success. Lab required. Prerequisite: Consent of Associate Dean/Director. Major Requirement: AAS or Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 2360 AAS Clinical II - Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 1360. Major Requirement: AAS Polysomnographic Technology. 3 credit hours. (W)

PSGT 2361 AAS Clinical III - Polysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 2360. Major Requirement: AAS Polysomnographic Technology. 3 credit hours. (W)

PSGT 2374 Clinical Sleep Education

Overview of the role of the Clinical Sleep Educator, including patient education delivery styles, examination of patient learning styles, and a review to optimize credentialing exam success on the Certification in Clinical Sleep Health (CCSH) Exam. Lab required. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

PSGT 2411 Polysomnography II

Current practices in polysomnography. Includes the use of specialized equipment used to record and monitor

various physiological parameters involved with sleep testing. Emphasizes sleep disorders, theory of testing and treatment procedures, and analysis of polysomnography data. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 4 credit hours. (W)

PSTR 1301 Fundamentals of Baking

Fundamentals of baking including dough, quick breads, pies, cakes, cookies, and tarts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1305 Breads and Rolls

Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1306 Cake Decorating I

Introduction to skills, concepts and techniques of cake decorating. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1310 Pies, Tarts, Teacakes, and Cookies

Focus on preparation of American and European style pie and tart fillings and dough, cookies, teacakes, custard and batters. Instruction of finishing and presentation techniques. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1312 Laminated Dough, Pate a Choux, and Donuts

Focus on preparation of laminated dough to include puff

pastry, croissant, Danish and a variety of pate a choux products and donuts. Fillings and finishing techniques included. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: PSTR 1310. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1340 Plated Desserts

Preparation and service of hot and cold desserts with a focus on individual desserts, a la minute preparations, and numerous components within one preparation. Emphasis on station organization, timing, and service coordination for restaurant dessert production. Professional chef uniform and kitchen tools required. Lab required.

Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1342 Quantity Bakeshop Production

Advanced baking techniques to include volume production of a variety of breads and desserts. Lab required. Prerequisite: PSTR 1343. 3 credit hours. (W)

PSTR 1343 Bakery Operations and Management

Introduction to management, marketing, supervision, and sanitation principles required in retail bakery operations. Emphasis on cost control, pricing, computer usage, and personnel issues. Lab required. Prerequisite: PSTR 1310. 3 credit hours. (W)

PSTR 1364 Practicum (or Field Experience) - Baking and Pastry Arts/Baker/Pastry Chef

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: PSTR 1310. 3 credit hours. (W)

PSTR 2301 Chocolates and Confections

Production and decoration of traditional truffles, marzipan, molded and hand-dipped chocolate, caramels, nougats, and pate de fruit. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 2307 Cake Decorating II

A course in decoration of specialized and seasonal products. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: PSTR 1306 with a

grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 2331 Advanced Pastry Shop

A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: PSTR 1305, PSTR 1306, PSTR 1310, PSTR 2301 and PSTR 2307. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 2380 Cooperative Education-Baking and Pastry Arts/Baker/Pastry Chef

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1305 with a grade of "C" or better, PSTR 1301 with a grade of "C" or better, and completion of 9 credit hours in the major core of PSTR. 3 credit hours. (W)

PSYC 2301 General Psychology

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2306 Human Sexuality

This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

Note: Students may take either PSYC 2306 or SOCI 2306 but not both.

PSYC 2314 Life-Span Growth and Development

Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. Prerequisites: PSYC 2301, and meet TSI college-readiness

standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2315 Psychology of Adjustment

Gives students deeper insight into their lives and those around them. Includes enhancing self awareness, stress coping, healthy relationships and dealing with loss. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2316 Psychology of Personality

In-depth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also included. Prerequisites: PSYC 2301, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2317 Statistical Methods in Psychology

This course covers descriptive and inferential statistics used in psychological research and assessment. It includes measurement, characteristics of distributions; measures of central tendency and variability; transformed scores; correlation and regression; probability theory; and hypotheses testing and inference. (PSYC 2317 is included in the Psychology Field of Study.) Prerequisite: PSYC 2301 and MATH 1314. 3 credit hours. (A)

PSYC 2319 Social Psychology

Research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, aggression, conformity, communication, values, roles and group processes. These principles will be applied to the human experience. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours (A)

PSYC 2320 Abnormal Psychology

This course provides an introduction to the psychological, biological, and socio-cultural factors involved in the development, diagnosis, and treatment of psychological disorders. It includes a review of the historical understanding of abnormal behavior and the development of modern diagnostic systems. It includes discussion of psychological research and practice as it relates to mental health and psychological functioning, as well as legal and ethical issues. (PSYC 2320 is included in the Psychology Field of Study.) Prerequisites: PSYC 2301, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2330 Biological Psychology

An introduction to the biological bases of behavior. Topics include evolution, genetics, research methods in behavioral neuroscience, motivation and emotion, sensation and perception, learning and memory, lifespan development, cognition, psychological disorders, and other complex behaviors. (PSYC 2330 is included in the

Psychology Field of Study.) Prerequisites: PSYC 2301, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2389 Academic Co-op Psychology

Integrates on-campus study with practical hands-on work experience in psychology. In conjunction with class seminars, the student will set specific goals and objectives in the study of psychology. Contact the Associate Dean/Director for more information. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PTHA 1160 Clinical - Physical Therapist Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PTHA 1409. 1 credit hour. (W)

PTHA 1201 The Profession of Physical Therapy

Introduction to the profession of physical therapy and the role of the physical therapist assistant. 2 credit hours. (W)

PTHA 1225 Communication in Health Care

Communication theories and principles for optimal delivery of health care. Prerequisite: PTHA 1409. 2 credit hours. (W)

PTHA 1229 Applied Physical Principles

The application of physical principles to selected interventions in physical therapy. Lab required. Prerequisite: PTHA 1409. 2 credit hours. (W)

PTHA 1266 Practicum - Physical Therapist Assistant I

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: PTHA 1225, PTHA 1229, PTHA 2201, PTHA 2205, PTHA 2409, PTHA 1321, PTHA 1413, and PTHA 1431. 2 credit hours. (W)

PTHA 1321 Pathophysiology for the PTA

Study of the pathophysiology of diseases/conditions encountered in physical therapy. Prerequisite: PTHA 1405. 3 credit hours. (W)

PTHA 1405 Basic Patient Care Skills

The application of basic patient handling, functional skills, communication, and selected data collection techniques. Lab required. Prerequisite: PTHA 1409. 4 credit hours. (W)

PTHA 1409 Introduction to Physical Therapy

Introduction to the profession of physical therapy and the role of the physical therapist assistant. Includes the application of basic patient handling, functional skills,

communication, and selected data collection techniques. Lab required. 4 credit hours. (W)

PTHA 1413 Functional Anatomy

The relationship of the musculoskeletal and neuromuscular systems to normal and abnormal movement. Lab required. Prerequisite: BIOL 2401. 4 credit hours. (W)

PTHA 1431 Physical Agents

Biophysical principles, physiological effects, efficacy, and application of physical agents. Lab required. Prerequisite: PTHA 1409. 4 credit hours. (W)

PTHA 2201 Essentials of Data Collection

Data collection techniques used to assist in patient/client management. Lab required. Prerequisite: PTHA 1405. 2 credit hours. (W)

PTHA 2205 Neurology

Study of neuroanatomy and neurophysiology as it relates to neurological conditions. Lab required. Prerequisite: PTHA 1409. 2 credit hours. (W)

PTHA 2239 Professional Issues

Discussion of professional issues and behaviors related to clinical practice; preparation for transition into the workforce. Prerequisite: PTHA 2435. 2 credit hours. (W)

PTHA 2250 Current Concepts in Physical Therapy

Current concepts, skills, and knowledge in the provision of physical therapy services. Includes enhancement of professional development. Lab required. Prerequisite: PTHA 2201. 2 credit hours. (W)

PTHA 2266 Practicum - Physical Therapist Assistant II

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: PTHA 2250, PTHA 2431, and PTHA 2435. 2 credit hours. (W)

PTHA 2267 Practicum - Physical Therapist Assistant III

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: PTHA 2250, PTHA 2431, and PTHA 2435. 2 credit hours. (W)

PTHA 2409 Therapeutic Exercise

Concepts, principles, and application of techniques related to therapeutic exercise and functional training. Lab required. Prerequisite: PTHA 1405. 4 credit hours. (W)

PTHA 2431 Management of Neurological Disorders

Comprehensive rehabilitation techniques of selected

neurological disorders. Lab required. Prerequisite: PTHA 2205. 4 credit hours. (W)

PTHA 2435 Rehabilitation Techniques

Comprehensive rehabilitation of selected diseases and disorders. Lab required. Prerequisite: PTHA 1266. 4 credit hours. (W)

RBTC 1405 Robotic Fundamentals

An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic manufacturing systems. Lab required. 4 credit hours. (W)

RBTC 2345 Robot Application, Set-up, and Testing

A course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance. Prerequisite: RBTC 1305. Lab required. 3 credit hours. (W)

RECL 1303 Athletic Program Planning

A study of planning, organizing, and conducting activities for athletic programs. 3 credit hours. (W)

RECT 1301 Introduction to Therapeutic Recreation

The history, purpose, and trends of therapeutic recreation. 3 credit hours. (W)

RELE 1300 Contract Forms and Addenda

Promulgated Contract Forms, which shall include, but is not limited to, unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use of forms and case studies involving use of forms. Prerequisite/Concurrent enrollment: RELE 1311. 3 credit hours. (W)

RELE 1301 Principles of Real Estate I

A beginning overview of licensing as a real estate broker and sales agent. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for sales agent license. 3 credit hours. (W)

RELE 1303 Real Estate Appraisal

The central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value

estimates, final correlations, and reporting. 3 credit hours. (W)

RELE 1307 Real Estate Investments

Characteristics of real estate investments. Includes techniques of investment analysis, time-valued money, discounted and nondiscounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. 3 credit hours. (W)

RELE 1311 Law of Contracts

Elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. 3 credit hours. (W)

RELE 1315 Property Management

The role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act. 3 credit hours. (W)

RELE 1319 Real Estate Finance

Monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity laws affecting mortgage lending, Community Reinvestment Act, and the state housing agency. 3 credit hours. (W)

RELE 1321 Real Estate Marketing

Real estate professionalism and ethics; characteristics of successful sales agent; time management; psychology of marketing; listing procedures; advertising; negotiation and closing financing; and the Deceptive Trade Practices-Consumer Protection Act. 3 credit hours. (W)

RELE 1325 Real Estate Mathematics

Basic arithmetic skills. Includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statements. 3 credit hours. (W)

RELE 1338 Principles of Real Estate II

A continuing overview of licensing as a broker or sales agent. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community

reinvestment. Fulfills at least 30 of 60 hours of required instruction for sales agent license. 3 credit hours. (W)

RELE 1380 Cooperative Education - Real Estate

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. 3 credit hours. (W)

RELE 2301 Law of Agency

Law of agency including principal-agent relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying representation procedures, and the disclosure of an agency. 3 credit hours. (W)

RELE 2331 Real Estate Brokerage

A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. 3 credit hours. (W)

RNSG 1125 Professional Nursing Concepts I

Introduction to professional nursing concepts and exemplars within the professional nursing roles: member of profession, provider of patient-centered care, patient safety advocate, and member of the health care team. Content includes clinical judgment, communication, ethical-legal, evidence-based practice, health promotion health information technology, patient-centered care, patient education, professionalism, safety, and team/collaboration. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisite: Admission to the AAS - Nursing (RN) Program. Corequisites: RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, or consent of Associate Dean/Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

RNSG 1126 Professional Nursing Concepts II

Expanding professional nursing concepts and exemplars within the professional nursing roles. Applying concepts of clinical judgment, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, and team/collaboration to the exemplars presented in the Health Care Concepts II course. Introduces concepts of leadership and management. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216 and RNSG 1430, all with a grade of "C" or better, or consent of

Program Director. Corequisites: RNSG 1533 and RNSG 2361, or consent of Associate Dean/Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (W)

RNSG 1128 Introduction to Health Care Concepts

An introduction to concept-based learning with emphasis on selected pathophysiological concepts with nursing applications. Concepts include acid-base balance, fluid and electrolytes, immunity, gas exchange, perfusion, metabolism, coping, and tissue integrity. This course lends itself to a concept-based approach. Prerequisites: Admission to the Nursing Program and consent of Associate Dean/Director. 1 credit hour. (W)

RNSG 1137 Professional Nursing Concepts III

Application of professional nursing concepts and exemplars within the professional nursing roles. Utilizes concepts of clinical judgment, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, teamwork, and collaboration. Introduces the concepts of quality improvement, health information technology, and health care organizations. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1126, RNSG 1533, and RNSG 2361; or RNSG 1424; or consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 1538 and RNSG 2362; or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (RN) or AAS – Nursing (LVN-to-RN Bridge). 1 credit hour. (W)

RNSG 1161 Clinical I-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, clinical experiences in an acute care facility give the student an opportunity to practice technical, assessment, and communication skills with patients. The student begins applying knowledge of concepts and developing clinical judgment skills in direct patient care. Specific learning objectives guide the student's clinical experiences, focusing on the application of concepts and skills learned in RNSG 1125, 1128, 1216, and 1430. Prerequisite: Admission to the AAS - Nursing (RN) Program. Corequisites: RNSG 1125, RNSG 1128, RNSG 1216, RNSG 1430, or consent of Associate Dean/Director. Major Requirement: AAS - Nursing (RN). 1 credit hour. (A)

RNSG 1163 Clinical I – Transitional Registered Nursing/Registered Nurse

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is

provided by the clinical professional. Additionally, virtual and classroom clinical experiences in the classroom, simulation, and lab facilities give the student an opportunity to practice technical, assessment, and communication skills with simulated patients. The student begins applying knowledge of concepts and developing clinical judgment skills in direct patient care. Specific learning objectives guide the student's virtual clinical experiences, focusing on the application of concepts and skills learned in previous semesters. Prerequisites: Admission to the Nursing (LVN-to-RN Bridge) Program and consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 1216 or consent of Associate Dean/Director. Corequisite: RNSG 1424 or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (LVN-to-RN Bridge). 1 credit hour. (W)

RNSG 1216 Professional Nursing Competencies

Development of professional nursing competencies in the care of patients throughout the lifespan. Emphasizes psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, and tissue integrity. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Lab required. Prerequisites: Admission to the Nursing Program and consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 1163 and RNSG 1424; or RNSG 1161 and RNSG 1430; or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (RN) or AAS – Nursing (LVN-to-RN Bridge). 2 credit hours. (W)

RNSG 1301 Pharmacology

Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of drug classifications. Content includes the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. This course lends itself to either a blocked or integrated approach. Lab required. Prerequisites: Admission to the Nursing (LVN-to-RN Bridge) Program and consent of Associate Dean/Director. Major Requirement: AAS – Nursing (LVN-to-RN Bridge). 3 credit hours. (W)

RNSG 1424 Concept-Based Transition to Professional Nursing Practice

Integration of previous health care knowledge and skills into the role development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Emphasis is on clinical decision-making for

patients and their families. Review of selected health care and professional nursing concepts with application through exemplars. Health care concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, coping, thermoregulation, tissue integrity, acid-base balance, clotting, cognition, fluid and electrolyte balance, gas exchange, immunity, metabolism, nutrition, grief, and perfusion. Professional nursing concepts include clinical judgment, communication, ethical-legal, evidence-based practice, health promotion, health information technology, patient-centered care, patient education, professionalism, safety, teamwork and collaboration. Introduces concepts of leadership and management. This course lends itself to a concept-based approach. Lab required. Prerequisites: Admission to the Nursing (LVN-to-RN Bridge) Program and consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 1216 or consent of Associate Dean/Director. Corequisite: RNSG 1163 or consent of Associate Dean/Director. Major Requirement: AAS –Nursing (LVN-to-RN Bridge). 4 credit hours. (W)

RNSG 1430 Health Care Concepts I

In-depth coverage of foundational health care concepts with application through selected exemplars. Concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, thermoregulation, grief, and tissue integrity. Emphasizes development of clinical judgment skills in the beginning nurse. This course lends itself to a concept-based approach. Lab required. Prerequisites: Admission to the Nursing Program and consent of Associate Dean/Director. 4 credit hours. (W)

RNSG 1533 Health Care Concepts II

In-depth coverage of health care concepts with application through selected exemplars. Concepts include acid-base balance, coping, clotting, cognition, fluid and electrolytes, gas exchange, immunity, metabolism, nutrition, comfort, and perfusion. Provides continuing opportunities for development of clinical judgment skills. This course lends itself to a concept-based approach. Lab required. Prerequisite: RNSG 1430. Major Requirement: AAS – Nursing (RN). 5 credit hours. (W)

RNSG 1538 Health Care Concepts III

In-depth coverage of health care concepts with nursing application through selected exemplars. Concepts include cellular regulation, end of life, immunity, interpersonal relationships, grief, human development, intracranial regulation, mood/affect, comfort, sexuality, mobility, and reproduction. Provides continuing opportunities for development of clinical judgment skills. This course lends itself to a concept-based approach. Lab required. Prerequisite: RNSG 1533 or RNSG 1424; or consent of Associate Dean/Director. Prerequisite/Concurrent

Enrollment: RNSG 1137 or consent of Associate Dean/Director. Corequisite: RNSG 2362 or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (RN) or AAS – Nursing (LVN-to-RN Bridge). 5 credit hours. (W)

RNSG 2138 Professional Nursing Concepts IV

Integration of professional nursing concepts and exemplars within the professional nursing roles. Synthesizes concepts of clinical judgment, ethical-legal, evidence-based practice, leadership and management, patient-centered care, professionalism, teamwork, and collaboration through exemplars presented in the Health Care Concepts courses. Emphasizes concept of quality improvement and introduces health policy. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1137, RNSG 1538, and RNSG 2362; or consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 2363 and RNSG 2539; or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (RN) or AAS – Nursing (LVN-to-RN Bridge). 1 credit hour. (W)

RNSG 2361 Clinical II-Nursing-Registered Nurse Training

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, clinical experiences in an acute care facility give the student an opportunity to practice technical, assessment, and communication skills with patients. The student continues applying knowledge of concepts and clinical judgment skills in direct patient care. A clinical experience in a psychiatric setting provides mental health experience. Specific learning objectives guide the student's clinical experiences, focusing on the application of concepts and skills learned in RNSG 1126 and RNSG 1533. Prerequisites: RNSG 1125, RNSG 1128, RNSG 1161, RNSG 1216, and RNSG 1430, all with a grade of "C" or better; or consent of Associate Dean/Director. Corequisites: RNSG 1126 and RNSG 1533, or consent of Associate Dean/Director. Major Requirement: AAS - Nursing (RN). 3 credit hours. (A)

RNSG 2362 Clinical III – Nursing – Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, the course focuses on application of critical reasoning and implementation of the nursing process to plan patient-centered care for patient/client systems with complex physiologic and psychosocial health needs/problems using evidence-based interventions. Care will include

measures to meet patient/client systems teaching/learning needs to promote and maintain optimal health status for the patient/client and their families. Course requires communication/documentation of care given, clinical reasoning to manage and coordinate quality, comprehensive patient-centered care and access to health care resources. Prerequisites: RNSG 2361 or RNSG 1163; or consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 1137 or consent of Associate Dean/Director. Corequisite: RNSG 1538 or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (RN) or AAS – Nursing (LVN-to-RN Bridge). 3 credit hours. (W)

RNSG 2363 Clinical IV – Nursing – Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, clinical reasoning, and concepts. Direct supervision is provided by the clinical professional. Additionally, the course focuses on transition from student nurse to the roles/competencies and responsibilities of the professional nurse utilizing the nursing process to meet the advanced and integrated health needs of the patient/client systems within hospital and community. Promotion of healthy lifestyles with consideration for preferences of culturally and socially diverse patient/client systems in collaboration with the interdisciplinary health care team to promote and maintain optimal health status. Prerequisites: RNSG 1538 and RNSG 2362; or consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 2138 or consent of Associate Dean/Director. Corequisite: RNSG 2539 or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (RN) or AAS – Nursing (LVN-to-RN Bridge). 3 credit hours. (W)

RNSG 2539 Health Care Concepts IV

In-depth coverage of advanced health care concepts with nursing application through selected exemplars. Concepts include, cognition, immunity, clotting, fluid and electrolyte balance, gas exchange, metabolism, nutrition, perfusion, tissue integrity, and interpersonal relationships. Continuing development of clinical judgment with integration of all health care concepts. This course lends itself to a concept-based approach. Lab required. Prerequisites: RNSG 1538 and RNSG 2362; or consent of Associate Dean/Director. Prerequisite/Concurrent Enrollment: RNSG 2138 or consent of Associate Dean/Director. Corequisite: RNSG 2363 or consent of Associate Dean/Director. Major Requirement: AAS – Nursing (RN) or AAS – Nursing (LVN-to-RN Bridge). 5 credit hours. (W)

RNSG 2563 Clinical III - Registered Nursing/Registered Nurse

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, this course will be a concentrated clinical learning experience to prepare the graduating student for transition from the LVN role to the role of a registered nurse. Prerequisites: RNSG 2162, RNSG 2230 and RNSG 2539. 5 credit hours. (W)

RSPT 1160 Clinical I-Respiratory Care Therapist

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Associate Dean/Director. Major Requirement: AAS-Respiratory Care. 1 credit hour. (W)

RSPT 1201 Introduction to Respiratory Care

An introduction to the field of respiratory care. Lab required. Prerequisite: Admission to the Respiratory Care Program. Corequisites: RSPT 1340 and RSPT 1410. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

RSPT 1213 Respiratory Care Pharmacology

A study of basic pharmacological principles/practices of cardiopulmonary drugs. Emphasis on classification, routes of administration, dosages/calculations, and physiological interaction. Prerequisites: RSPT 1201, RSPT 1160, RSPT 1340 and RSPT 1410; all with a grade “C” or better. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

RSPT 1237 Basic Dysrhythmia Interpretation

Study of electrophysiology of the heart and characteristics of cardiac dysrhythmias. 2 credit hours. (W)

RSPT 1240 Advanced Cardiopulmonary Anatomy and Physiology

Provides an advanced presentation of anatomy and physiology of the cardiovascular and pulmonary system. 2 credit hours. (W)

RSPT 1340 Advanced Cardiopulmonary Anatomy and Physiology

Provides an advanced presentation of anatomy and physiology of the cardiovascular and pulmonary system. Lab required. Prerequisite: Admission to the Respiratory Care Program. 3 credit hours. (W)

RSPT 1361 Clinical II-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational

theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1160 with a grade of “C” or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

RSPT 1362 Clinical III-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1361 with a grade of “C” or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

RSPT 1410 Respiratory Care Procedures I

Essential knowledge of the equipment and techniques used in the treatment of cardiopulmonary disease. Lab required. Prerequisite: Admission to the Respiratory Care Program. Major Requirement: AAS-Respiratory Care. 4 credit hours. (W)

RSPT 1411 Respiratory Care Procedures II

Develops essential knowledge and skills of airway care and mechanical ventilation. Lab required. Prerequisite: RSPT 1410 with a grade of “C” or better. Major Requirement: AAS - Respiratory Care. 4 credit hours. (W)

RSPT 2130 Respiratory Care Examination Preparation

Comprehensive review to optimize respiratory care credentialing exam success. Lab required. Prerequisites: RSPT 2255, RSPT 2353, and RSPT 2360; all with a grade of “C” or better. Corequisites: RSPT 2139, RSPT 2147, RSPT 2231, and RSPT 2361. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

RSPT 2139 Advanced Cardiac Life Support

Advanced Cardiac Life Support (ACLS) with an emphasis on airway management. Designed to develop skills for resuscitation of the adult. Includes strategies for managing and stabilizing the cardiopulmonary arrested patient. May include certification based on American Heart Association standards. Prerequisites: RSPT 2255, RSPT 2353 and RSPT 2360; all with a grade of “C” or better. Corequisites: RSPT 2130, RSPT 2147, RSPT 2231 and RSPT 2361. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

RSPT 2147 Specialties in Respiratory Care

Emerging and specialty practices in respiratory care. Additionally, this is an introduction to areas of interest in which the Respiratory Therapist may find application and/or employment. The depth of instruction will provide the indications, expected outcomes, hazards and methods for hyperbaric oxygen (HBO), extracorporeal membrane oxygenation (ECMO), nitric oxide (NO), sleep studies, nutritional assessment, metabolic monitoring, exercise/stress testing, and electroencephalographs. Also

includes home care/rehabilitation, and fluid and electrolyte balance. Lab required. Prerequisites: RSPT 2255, RSPT 2353 and RSPT 2360; all with a grade of “C” or better. Major Requirement: AAS - Respiratory Care. 1 credit hour. (W)

RSPT 2231 Simulations in Respiratory Care

Theory of clinical simulation examinations. Includes construction types, scoring, and mechanics of taking the computerized simulation examination. Prerequisite: RSPT 2255 with a grade of “C” or better. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

RSPT 2255 Critical Care Monitoring

Advanced monitoring techniques used to assess a patient in the critical care setting. Lab required. Prerequisites: RSPT 1362 and RSPT 2414; both with a grade of C or better. Corequisites: RSPT 2353 and RSPT 2360. Major Requirement: AAS - Respiratory Care. 2 credit hours. (W)

RSPT 2310 Cardiopulmonary Disease

Etiology, pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment, and detection of cardiopulmonary diseases. Lab required. Prerequisites: RSPT 1160, RSPT 1201, RSPT 1340 and RSPT 1410; all with a grade of C or better. Corequisites: RSPT 1361 and RSPT 1411. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

RSPT 2353 Neonatal/Pediatric Cardiopulmonary Care

A study of neonatal and pediatric cardiopulmonary care. Lab required. Prerequisites: RSPT 1362 and RSPT 2414; both with a grade of C or better. Corequisites: RSPT 2255 and RSPT 2360. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

RSPT 2360 Clinical IV-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1362 with a grade of “C” or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

RSPT 2361 Clinical V-Respiratory Care Therapist

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 2360 with a grade of “C” or better. Major Requirement: AAS - Respiratory Care. 3 credit hours. (W)

RSPT 2414 Mechanical Ventilation

The study of mechanical ventilation with emphasis on ventilator classification, methods, principles, and operational characteristics. Lab required. Prerequisite:

Successful completion of the first two semesters of the Respiratory Care Program. Corequisite: RSPT 1362. Major Requirement: Admission to the Respiratory Care Program. 4 credit hours. (W)

RSTO 1301 Beverage Management

A study of the beverage service of the hospitality industry including spirits, wines, beers, and non-alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods. Prerequisite / Concurrent Enrollment: HAMG 1321. 3 credit hours. (W)

RSTO 1304 Dining Room Service

Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Lab required. Prerequisite/Concurrent enrollment: CHEF 1314. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

RSTO 1325 Purchasing for Hospitality Operations

Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. Lab required. Prerequisites / Concurrent Enrollment: CHEF 1305 and HAMG 1321. 3 credit hours. (W)

RSTO 1364 Practicum (or Field Experience) - Restaurant, Culinary, and Catering Management/Manager

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite / Concurrent Enrollment: RSTO 1325. 3 credit hours. (W)

RSTO 2307 Catering

Principles, techniques, and applications for both on-premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques. Lab required. Prerequisite / Concurrent Enrollment: HAMG 2301 or consent of Associate Dean/Director. 3 credit hours. (W)

RTVB 1321 TV/Video Field Production

Video field camera set up and operation for broadcast and digital media. Incorporates basic editing and field

audio techniques. Lab required. Prerequisites: ARTV 1351, FLMC 2330, and RTVB 1329. 3 credit hours. (W)

RTVB 1325 TV Studio Production

Basic television studio production including planning, directing and applying techniques commonly used with video, audio and lighting equipment. Lab required. Prerequisites: ARTV 1351 and FLMC 2330. 3 credit hours. (W)

RTVB 1329 Scriptwriting

Writing scripts for digital media. Emphasizes format and style for commercials, public service announcements, promos, news, and documentaries. Lab required. 3 credit hours. (W)

RTVB 2330 Film and Video Editing

Digital media editing for the preparation and completion of shorts, trailers, documentaries, and features. Prerequisites: FLMC 1331 and FLMC 2330. Lab required. 3 credit hours. (W)

RTVB 2337 TV/Video Production Workshop I

Design and production of video content for location or studio shoots adhering to deadline requirements and industry standards. Lab required. Prerequisites: RTVB 1325 and ARTV 2320. 3 credit hours. (W)

RTVB 2340 Portfolio Development

Preparation and presentation of a portfolio suitable for employment in the media industry. This course is intended to be taken in the last semester. Lab required. Prerequisite: Consent of Associate Dean/Director. 3 credit hours. (W)

RTVB 2347 Digital Media Business Management

Analysis of management principles and development of business plans for media enterprises. Lab required. Prerequisites: ARTV 2320, FLMC 2333, and RTVB 2330. 3 credit hours. (W)

RUSS 1411 Beginning Russian I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Russian culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, computer software, and video cassettes. Lab required. 4 credit hours. (A)

RUSS 1412 Beginning Russian II

Continuation of RUSS 1411. Lab required. Prerequisite: RUSS 1411 or consent of Associate Dean/Director. 4 credit hours. (A)

RUSS 2311 Intermediate Russian I

Intensive review of Russian grammar followed by continued development of speaking, listening, reading

and writing skills. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSS 1412 or consent of Associate Dean/Director. 3 credit hours. (A)

RUSS 2312 Intermediate Russian II

Continuation of RUSS 2311. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSS 2311 or consent of Associate Dean/Director. 3 credit hours. (A)

SGNL 1401 Beginning American Sign Language I

Introduction to American Sign Language, Deaf culture, and to a brief history of sign and culture. Includes development of expressive and receptive sign skills, together with the learning of numbers, sign vocabulary, and the manual alphabet. Class is conducted primarily without voice. Lab required. 4 credit hours. (A)

SGNL 1402 Beginning American Sign Language II

Study of sign vocabulary, numbers, fingerspelling and Deaf culture. Emphasizes further development of receptive skills, expressive skills, application of rudimentary syntactical and grammatical structures, and an understanding of Deaf and Hearing cultures. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1401 or credit by exam. 4 credit hours. (A)

SGNL 2301 Intermediate American Sign Language I

Introduction to the intermediate skills needed in the production and comprehension of American Sign Language used in everyday communication. The course gives students an overview of the history, values, and social norms of the Deaf community in the United States. This course integrates and refines expressive and receptive skills in American Sign Language, including recognition of sociolinguistic variations. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1402 with a grade of "C" or better. 3 credit hours. (A)

SGNL 2302 Intermediate American Sign Language II

A continuation of SGNL 2301, American Sign Language Intermediate II provides a review and application of conversational skills in American Sign Language and provides intensive practice in interpreting from signing to voice as well as from voice to signing, while increasing vocabulary. The course provides an introduction to American Sign Language literature and folklore. (The course includes grammar and vocabularies used in "real life" situations.) Lab required. Prerequisite: SGNL 2301 with a grade of "C" or better. 3 credit hours. (A)

SLNG 1207 Intra-lingual Skills Development for Interpreters

Development of intra-lingual (English to English) skills

necessary for future development of inter-lingual (English to American Sign Language [ASL]/ASL to English) skills. Focus on linguistic and cognitive skills development in areas of paraphrasing, summarizing, main idea identification, comprehension, memory, delayed repetition, multi-tasking, vocabulary, and cultural literacy. Lab required. Offered spring semester only. 2 credit hours. (W)

SLNG 1211 Fingerspelling and Numbers

Development of expressive and receptive skills in fingerspelling and numbers. Receptive skills focus on whole word phrase recognition and fingerspelling/number comprehension in context. Expressive skills focus on the development of speed, clarity, and fluency. Lab required. Prerequisite: SGNL 1402. 2 credit hours. (W)

SLNG 1215 Visual/Gestural Communication

Development of skills in non-verbal communications. Emphasizes the use and understanding of facial expression, gestures, pantomime, and body language. Lab required. Offered fall semester only. 2 credit hours. (W)

SLNG 1248 Vocabulary Development for Interpreters

A course in vocabulary building in English and American Sign Language for interpreters. Lab required. Offered Summer only. Prerequisites: SLNG 2302 and SLNG 2303, or consent of Associate Dean/Director. 2 credit hours. (W)

SLNG 1321 Introduction to the Interpreting Profession

An overview of the field of American Sign Language (ASL)/English interpretation. Provides a historical framework for the current principles, ethics, roles, responsibilities, and standard practices of the interpreting profession. Lab required. Prerequisite / Concurrent enrollment: SGNL 2301. 3 credit hours. (W)

SLNG 1347 Deaf Culture

Historical and contemporary perspective of American Deaf culture using a socio-cultural model. Includes cultural identity and awareness, values, group norms, communication, language, and significant contributions made by D/deaf people to the world. 3 credit hours. (W)

SLNG 1350 Sign-to-Voice

Skill development in interpreting and transliterating from American Sign Language and other modes of communication to English and analysis of increasingly complex tasks utilizing simulated interpreting experiences including skills analysis and peer evaluation. Lab required.

Prerequisite: SLNG 1321. Offered fall semester only. 3 credit hours. (W)

SLNG 2186 Internship I - Sign Language Interpretation and Translation

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisites: SLNG 1350 and SLNG 2301. 1 credit hour. (W)

SLNG 2189 ESC Internship - Sign Language Interpretation and Translation

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite/ Concurrent enrollment: SLNG 2371. 1 credit hour. (W)

SLNG 2301 Interpreting I

An overview of the interpreting process and models of interpretation. Introduces the skills necessary to achieve dynamic message equivalence in interpreting American Sign Language (ASL) to English and English to ASL. Lab required. Prerequisite: SLNG 1321. Prerequisite / Concurrent Enrollment: SGNL 2302. 3 credit hours. (W)

SLNG 2302 Interpreting II

Continued development of discourse analysis and interpreting skills for increasingly complex tasks. Utilization of consecutive and simultaneous interpreting scenarios including monologues and dialogues. Emphasizes skill development, self-analysis, and peer evaluation. Lab required. Prerequisite/Concurrent enrollment: SLNG 2301. Offered spring semester only. 3 credit hours. (W)

SLNG 2303 Transliterating

A practice-oriented course designed to develop skills necessary for rendering spoken English to a signed English format and signed English to spoken English. Lab required. Prerequisite: SLNG 2301. Offered spring semester only. 3 credit hours. (W)

SLNG 2311 Interpreting in Specialized Settings

Overview of interpreting/transliterating with special populations (e.g., deaf/blind, high visual, oral) and/or special settings (e.g., religious, artistic, medical, legal, mental health). Reinforce interpreting theories and techniques in relation to special population(s) and/or setting(s). Lab required. Prerequisites: SLNG 1350 and SLNG 2301. Offered spring semester only. 3 credit hours. (W)

SLNG 2331 Interpreting III

A practice-oriented course to strengthen skills in the integration and application of interpreting using complex

source materials. Continued exposure to simulated interpreting/transliterating experiences. Lab required. Offered summer semester only. Prerequisite: SLNG 2302 or consent of Associate Dean/Director. 3 credit hours. (W)

SLNG 2371 Interpreting in the Medical Setting

Methods and practice of interpreting skills (consecutive, simultaneous, and sign translation) in medical contexts, including protocols for managing sessions with patients, standards of practice for health care interpreters, roles of the health care interpreters, cultural awareness, legislation and regulations (ADA, Section 405 or Rehabilitation Act, Title VI of Civil Rights Act, HIPAA, HITECH, CLAS), legal status (voluntary, POEC, OPC) common specialties and medications (including physical and mental health), and routine medical equipment. Lab required. Prerequisite: HITT 1305. 3 credit hours. (W)

SLNG 2387 Internship II – Sign Language Interpretation and Translation

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Offered summer semester only. Prerequisites: SLNG 2186, SLNG 2302 and SLNG 2303. 3 credit hours. (W)

SOCI 1301 Introduction to Sociology

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 1306 Social Problems

Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 2301 Marriage & the Family

Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society. Prerequisite: Meet TSI college-

readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 2306 Human Sexuality

This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

Note: Student may take either PSYC 2306 or SOCI 2306 but not both.

SOCI 2319 Minority Studies

This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance / subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race / ethnicity, gender, sexual orientation, age, disability, or religion. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 2340 Drug Use and Abuse

Study of the use and abuse of drugs in today's society. Emphasis on the physiological, psychological, and sociological factors that contribute to this behavior. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 2389 Academic Co-op Sociology

Integrates on-campus study with practical hands-on work experience in sociology. In conjunction with class seminars, the student will set specific goals and objectives in the study of sociology. Contact the Associate Dean/Director for more information. Prerequisite: Consent of Associate Dean/Director, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCW 2361 Introduction to Social Work

An overview of the history, fields, skills, and values of social work practice in the United States. Prerequisite:

Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCW 2362 Social Welfare

This course provides an overview of contemporary social welfare including income support services, mental health services and services for children and families. It includes an examination of social welfare policy and programs. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. Prerequisite/Concurrent enrollment: SOCW 2361. 3 credit hours. (A)

SOCW 2389 Academic Co-op Social Work

A supervised experiential learning course designed to integrate program study with introductory exposure to the field of social work. In conjunction with individual study and/or seminars, the student will set specific goals and objectives in the study of social work and/or social institutions. The academic cooperative is not a social work skills-based practice experience, but instead, an observational volunteer experience. The course must include a minimum of 80 contact hours (48 hours in a social service setting). (SOCW 2389 is included in the Social Work Field of Study.) Prerequisite: SOCW 2361. 3 credit hours. (A)

SPAN 1411 Beginning Spanish I

Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level. Lab required. 4 credit hours. (A)

SPAN 1412 Beginning Spanish II

Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level. Lab required. Prerequisite: SPAN 1411 or consent of Associate Dean/Director. 4 credit hours. (A)

SPAN 2311 Intermediate Spanish I

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Associate Dean/Director. 3 credit hours. (A)

SPAN 2312 Intermediate Spanish II

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the

cultures of the Spanish-speaking world. Prerequisite: SPAN 2311 or consent of Associate Dean/Director. 3 credit hours. (A)

SPAN 2313 Spanish for Native/Heritage Speakers I

Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Associate Dean/Director. 3 credit hours. (A)

SPAN 2315 Spanish for Native/Heritage Speakers II

Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 2313 or consent of Associate Dean/Director. 3 credit hours. (A)

SPCH 1311 Introduction to Speech Communication

Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SPCH 1315 Public Speaking

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Additionally, it includes student evaluation of speakers and speeches. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SPCH 1318 Interpersonal Communication

Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors. Additionally, this course focuses on interpersonal contexts such as gender communication, conflict, intercultural communication, and listening. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SPCH 1321 Business and Professional Communication

Study and application of communication within the business and professional context. Special emphasis will

be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Additionally, it includes the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SPCH 2335 Argumentation and Debate

This course introduces the students to various argumentation techniques. The student will learn basic research skills and methods of cataloging evidence. The student will learn to organize and present ideas in effective communication paradigms. Individual debate and team formats will be demonstrated. 3 credit hours. (A)

SPCH 2389 Academic Co-op Speech

Integrates on-campus study with practical hands-on work experience in speech. In conjunction with class seminars, the student will set specific goals and objectives in the study of speech. Contact the Associate Dean/Director for more information. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SRGT 1171 Transition to Practice for the Surgical Technologist

This course provides surgical technology students with information and skills to assist in transition from the role of student to the role of a practicing surgical technologist. Information gained about high performance work teams is applied to the surgical setting. Service quality management and diversity concepts are applied to surgical settings. Lab required. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 2130 and SRGT 2561, or consent of Associate Dean/Director. Major Requirement: AAS - Surgical Technology. 1 credit hour. (W)

SRGT 1271 Basic Skills of Surgical Technology

Learn the fundamentals and foundations of Surgical Technology; Apply basic skills of Surgical Technology in a mock laboratory environment in order to gain the skills needed to perform in the healthcare setting. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1409, or consent of Associate Dean/Director. Major Requirement: AAS - Surgical Technology. 2 credit hours. (W)

SRGT 1409 Fundamentals of Peri-operative Concepts and Techniques

In-depth coverage of peri-operative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. Lab required. Prerequisite: Admission to the

Surgical Technology Program. Corequisite: SRGT 1271, or consent of Associate Dean/Director. Major Requirement: AAS - Surgical Technology. 4 credit hours. (W)

SRGT 1441 Surgical Procedures I

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1461, or consent of Associate Dean/Director. Major Requirement: AAS -Surgical Technology. 4 credit hours. (W)

SRGT 1442 Surgical Procedures II

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the cardiothoracic, peripheral vascular, plastic / reconstructive, ophthalmology, oral / maxillofacial, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Lab required. Prerequisites: HPRS 2300, SRGT 1441, and SRGT 1461. Corequisites: SRGT 1171, SRGT 2130 and SRGT 2561, or consent of Associate Dean/Director. Major Requirement: AAS -Surgical Technology. 4 credit hours. (W)

SRGT 1461 Clinical - Surgical Technology I

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Additionally, the student is allowed to participate as a member of the surgical team under the supervision of the affiliate hospital staff or a clinical instructor in an aseptic environment. Case assignments will be assigned according to specific clinical rotations. Prerequisites: SRGT 1271 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1441, or consent of Associate Dean/Director. Major Requirement: AAS -Surgical Technology. 4 credit hours. (W)

SRGT 2130 Professional Readiness

Overview of professional readiness for employment, attaining certification, and maintaining certification status. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 1171, SRGT 1442, and SRGT 2561, or consent of Associate Dean/Director. Major Requirement: AAS -Surgical Technology. 1 credit hour. (W)

SRGT 2561 Clinical - Surgical Technology II

A health-related work-based learning experience that enables the student to apply specialized occupational

theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: HPRS 2300, SRGT 1441 and SRGT 1461. Corequisites: SRGT 1171, SRGT 1442 and SRGT 2130, or consent of Associate Dean/Director. Major Requirement: AAS - Surgical Technology. 5 credit hours (W)

SUAS 1371 Small Unmanned Aerial Systems (Drones)

This course is an introduction to Small Unmanned Aerial Systems (SUAS), commonly called drones. The course will cover the uses of drones, the electronic and mechanical systems used by drones, FAA regulations related to drones, and drone flight with applications. Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (W)

TECA 1303 Families, School and Community

A study of the child, family, community, and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

TECA 1311 Educating Young Children

An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities and current issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and the course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

TECA 1318 Wellness of the Young Child

A study of the factors that impact the well-being of the young child including healthy behavior, food nutrition, fitness, and safety practices. Focus on local and national

standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

TECA 1354 Child Growth and Development

A study of the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

TECM 1343 Technical Algebra and Trigonometry

Algebraic and trigonometric applications used in technical/industrial settings. Lab required. 3 credit hours. (W)

TRVM 1327 Special Events Design

The development of a special event from the conceptual stage through completion. Emphasis on industry terminology, factors to consider when planning a special event, and contingency plans. 3 credit hours. (W)

TRVM 1366 Practicum (or Field Experience) - Tourism and Travel Services Management

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite / Concurrent Enrollment: TRVM 2301. 3 credit hours. (W)

TRVM 2301 Introduction to Convention/Meeting Management

Overview of the meetings and convention industry and the various aspects and skills involved in planning and managing meeting, conventions, and expositions. Emphasis on types of meetings, markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, function and meeting room setup, and audiovisual requirements. 3 credit hours. (W)

TRVM 2341 International Convention/Meeting Management

Apply the principles of convention / meeting management in an international setting. Compare the differences in planning a domestic versus an international meeting; including contract negotiation, foreign currency, customs and laws, exposition, marketing, shipping,

languages, cultures, and how foreign policy affects the meeting planning process. Identify resources to assist planner in development of an international meeting. Prerequisite / Concurrent Enrollment: TRVM 2301. 3 credit hours. (W)

TRVM 2355 Exposition and Trade Show Operations

An overview of trade shows and exhibitions operations. Prerequisite / Concurrent Enrollment: TRVM 2301. 3 credit hours. (W)

TRVM 2380 Cooperative Education-Tourism and Travel Services Management

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisites: HAMG 1324, HAMG 1340, TRVM 1323, TRVM 1327, TRVM 2301, TRVM 2341 and TRVM 2355; or consent of Associate Dean/Director. 3 credit hours. (W)

UXUI 1370 Human Factors and Design Psychology

This course presents the principles of human/computer interaction. Students are expected to gain knowledge and expertise to contribute to the design process in computer-based, user-centered systems in which user and task needs are given primary importance. Students also evaluate the usability of interactive systems in fulfilling the requirements of their users. Lab required. Prerequisite/Concurrent Enrollment: ARTC 2371. 3 credit hours. (W)

UXUI 1371 Prototyping and Usability Testing I

Introduction to foundational prototyping and user testing methods for use in the design of products. Lab required. Prerequisites: UXUI 1370 and ARTC 1359. 3 credit hours. (W)

VNSG 1205 NCLEX-PN Review

Review of nursing knowledge and skills, study skills, stress management techniques, and test-taking strategies to prepare the graduate vocational nurse (GVN) to take the National Licensure Examination-Practical Nurse (NCLEX-PN). Lab required. Corequisites: VNSG 1579 and VNSG 2363. Prerequisites: VNSG 1262, VNSG 1271, VNSG 1571, and VNSG 1578. 2 credit hours. (W)

VNSG 1230 Maternal-Neonatal Nursing

A study of the biological, psychological, and sociological concepts applicable to basic needs of the family during childbearing and neonatal care. Utilization of the nursing process in the assessment and management of a childbearing family. Topics include physiological changes

related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the puerperium. Lab required. Corequisite: VNSG 1238. Prerequisites: VNSG 1261, VNSG 1270, VNSG 1570, and VNSG 1577. 2 credit hours. (W)

VNSG 1238 Mental Illness

Study of human behavior with emphasis on emotional and mental abnormalities and modes of treatment incorporating the nursing process. Corequisite: VNSG 1230. Prerequisites: VNSG 1261, VNSG 1270, VNSG 1570, and VNSG 1577. 2 credit hours. (W)

VNSG 1261 Clinical I - Licensed Practical/Vocational Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Corequisites: BIOL 2404, VNSG 1270, VNSG 1570, and VNSG 1577. Prerequisite: Admission to the Vocational Nursing Program. 2 credit hours. (W)

VNSG 1262 Clinical II - Licensed Practical/Vocational Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Corequisites: VNSG 1271, VNSG 1571, and VNSG 1578. Prerequisites: BIOL 2404, VNSG 1261, VNSG 1270, VNSG 1570, and VNSG 1577. 2 credit hours. (W)

VNSG 1270 Concept-Based Nursing Principles I

An introduction to concepts essential to the professional behavior and safe practice of vocational nursing. Concepts include clinical reasoning and judgment, ethical & legal practice, teamwork, safety, evidence-based care, patient-centered care, cultural and spiritual domains, normal human development, family dynamics, technology, and therapeutic communication. Corequisites: BIOL 2404, VNSG 1261, VNSG 1570, and VNSG 1577. Prerequisite: Admission to the Vocational Nursing Program. 2 credit hours. (W)

VNSG 1271 Concept-Based Nursing Principles II

A continued exploration of professional nursing concepts and related exemplars applied to the role of the vocational nurse. Clinical judgment, quality of care, and safety education for the nurse's knowledge, skills and attitudes are the basis for role development. Corequisites: VNSG 1262, VNSG 1571, and VNSG 1578. Prerequisites: BIOL 2404, VNSG 1261, VNSG 1270, VNSG 1570, and VNSG 1577. 2 credit hours. (W)

VNSG 1570 Concept-Based Skills I

A conceptual approach to patient-centered foundational

nursing skills. Focus on performance and understanding rationales for non-sterile skill techniques when providing patient care, hygiene, infection control, assessment skills, identifying/reporting outcomes, patient education, nutrition, feeding tubes, elimination, medication administration, medical terminology oxygen administration. Competent, safe skill mastery is determined by written testing and individual skill evaluations in lab. Lab required. Corequisites: BIOL 2404, VNSG 1261, VNSG 1270, and VNSG 1577. Prerequisite: Admission to the Vocational Nursing Program. 5 credit hours. (W)

VNSG 1571 Concept-Based Skills II

A continued study using a conceptual approach for intermediate and advanced nursing skills in patient-centered care. Focus on performance and understanding rationales for skill techniques when providing nursing care, IV therapy, phlebotomy skills, obtaining a 12 lead EKG, basic EKG interpretation, usage of AED, colostomy care, tracheostomy care and suction, ambu bag, oxygenation, urinary catheterization, maintenance of nephrostomy tubes, wound dressings, wound vacs, chest tube pleurovac, mechanical ventilation, identifying/reporting outcomes, patient education, hygiene and sterile technique. Previous mastered skills will also be demonstrated by students to insure continued skill proficiency. Competent, safe skill mastery is determined by written testing and individual skill evaluations in lab. Lab required. Corequisites: VNSG 1262, VNSG 1271, and VNSG 1578. Prerequisites: BIOL 2404, VNSG 1261, VNSG 1270, VNSG 1570, and VNSG 1577. 5 credit hours. (W)

VNSG 1577 Concept-Based Nursing Care I

This course examines a conceptual approach to nursing care for clients experiencing health as well as predictable, commonly occurring alterations in health throughout the lifespan. Emphasis will be placed on the nursing process as well as Tanner's Model of Clinical Judgment to develop the students' clinical reasoning skills. Lab required. Corequisites: BIOL 2404, VNSG 1261, VNSG 1270, and VNSG 1570. Prerequisite: Admission to the Vocational Nursing Program. 5 credit hours. (W)

VNSG 1578 Concept-Based Nursing Care II

This course examines a conceptual approach to nursing care for clients experiencing health as well as predictable, commonly occurring alterations in health throughout the lifespan. Emphasis will be placed on the nursing process as well as Tanner's Model of Clinical Judgment to develop the students' clinical reasoning skills. Lab required. Corequisites: VNSG 1262, VNSG 1271, and VNSG 1571. Prerequisites: BIOL 2404, VNSG 1261,

VNSG, 1270, VNSG 1570, and VNSG 1577. 5 credit hours. (W)

VNSG 1579 Concept-Based Nursing Care III

This course examines a conceptual approach to nursing care for clients experiencing health as well as predictable, commonly occurring alterations in health throughout the lifespan. Emphasis will be placed on the nursing process as well as Tanner's Model of Clinical Judgment to develop the students' clinical reasoning skills. Lab required. Corequisites: VNSG 1205, VNSG 1230, VNSG 1238, and VNSG 2363. Prerequisites: VNSG 1262, VNSG 1571, and VNSG 1578. 5 credit hours. (W)

VNSG 2363 Clinical III - Licensed Practical/Vocational Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Corequisites: VNSG 1205 and VNSG 1579. Prerequisites: VNSG 1262 and VNSG 1578. 3 credit hours. (W)

VTHT 1105 Veterinary Medical Terminology

Introduction to word parts, directional terminology, and analysis of veterinary terms. 1 credit hour. (W)

VTHT 1217 Veterinary Office Management

Practical experience in management of the veterinary practice. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment. 2 credit hours. (W)

VTHT 1245 Veterinary Radiology

Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. Lab required. Prerequisite: VTHT 1313. 2 credit hours. (W)

VTHT 1271 Veterinary Technician National Examination (VTNE) Prep Course

Preparation for the national licensing exam. Prerequisites: VTHT 1245, VTHT 1341, VTHT 2209, and VTHT 2213. 2 credit hours. (W)

VTHT 1280 Cooperative Education I - Veterinary/Animal Health Technology/Technician and Veterinary Assistant

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the

Associate Dean/Director for more information.

Prerequisite: Departmental Permit. 2 credit hours. (W)

VTHT 1301 Introduction to Veterinary Technology

Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of animals, and ethical and professional requirements. Lab required. 3 credit hours. (W)

VTHT 1313 Veterinary Anatomy and Physiology

Gross anatomy of domestic animals including physiological explanations of how each organ system functions. Lab required. 3 credit hours. (W)

VTHT 1341 Anesthesia and Surgical Assistance

In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. Lab required. Prerequisites: VTHT 1349 and VTHT 2331. 3 credit hours. (W)

VTHT 1349 Veterinary Pharmacology

Fundamentals of pharmacology including recognition, calculation, labeling, packaging, and administration of veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to these agents. Lab required. Prerequisite: VTHT 1313. 3 credit hours. (W)

VTHT 2201 Canine and Feline Clinical Management

Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canines and felines encountered in the practice of veterinary medicine. 2 credit hours. (W)

VTHT 2205 Equine Clinical Management

Survey of feeding, common management practices, and care of equines in a clinical setting. Review of common diseases of equines encountered in the practice of veterinary medicine. Lab required. 2 credit hours. (W)

VTHT 2209 Food Animal Clinical Management

Survey of feeding, management practices, and care of food producing animals in a clinical setting. Review of common diseases of food producing animals. Lab required. Prerequisite: VTHT 1313. 2 credit hours. (W)

VTHT 2213 Lab Animal Clinical Management

Survey of feeding, management practices, and care of laboratory animals in a clinical setting. Review of common diseases of laboratory animals encountered in the practice of veterinary medicine. Lab required. 2 credit hours. (W)

VTHT 2280 Cooperative Education II - Veterinary/Animal Health Technology/Technician and Veterinary Assistant

Career-related activities encountered in the student's area

of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Associate Dean/Director for more information. Prerequisites: VTHT 1280 and VTHT 1341. 2 credit hours. (W)

VTHT 2321 Veterinary Parasitology

Study of parasites common to domestic animals including zoonotic diseases. Lab required. 3 credit hours. (W)

VTHT 2323 Veterinary Clinical Pathology I

In-depth study of hematology and blood chemistries with emphasis on lab procedures. Lab required. Prerequisites: VTHT 2321 and VTHT 1313. 3 credit hours. (W)

VTHT 2325 Large Animal Assisting Techniques

Study of restraint, management, treatment, and medication techniques for farm animals. Lab required. Prerequisite: VTHT 1313. 3 credit hours. (W)

VTHT 2331 Veterinary Clinical Pathology II

In-depth study of urinalysis and cytology. Survey of microbiological techniques. Emphasis on laboratory procedures. Lab required. Prerequisite: VTHT 2323. 3 credit hours. (W)

VTHT 2439 Veterinary Nursing Care

Capstone course requiring integration of course work in the field of veterinary technology. Lab required. Prerequisite: VTHT 1341. 4 credit hours. (W)

WLDG 1308 Metal Sculpture

Techniques and methods of oxy-fuel and electric welding and cutting to produce ornamental and functional items. Skill development in material forming, welding, brazing, and finishing techniques. Includes work ethics, artistic styles, and professionalism. Lab required. Prerequisite: Departmental Permit. 3 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1313 Introduction to Blueprint Reading for Welders

A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production. Lab required. Prerequisites: WLDG 1428, WLDG 1430, and WLDG 1434. 3 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching,

bending, and working around open flames and intense heat for extended periods of time.

WLDG 1317 Introduction to Layout and Fabrication

A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction. Lab required. Prerequisite: WLDG 1313. 3 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1371 Introduction to Metal Casting

Fundamentals of conceptualizing and producing cast items in ferrous and non-ferrous metals. Skill development through the casting process to create objects from different materials. Includes welding, brazing, pattern making, mold making, flask construction and casting of ferrous and non-ferrous metals. Lab required. Prerequisite: Departmental Permit. 3 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1401 Metalsmithing

Basic skill development in hand-forging steel, forge welding, scroll-forming, shaping, and joinery utilizing hammers, anvils, and coal and gas forges. Emphasis on techniques and processes to demonstrate versatility and skill. Lab required. Prerequisite: Departmental Permit. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1405 Art Metals

Fundamentals of producing utilitarian and ornamental items in various metals. Skills development through the techniques used in fabrication with sheet and/or stock materials including various welding and cutting processes. Lab required. Prerequisite: Departmental Permit. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1407 Introduction to Welding Using Multiple Processes

Basic welding techniques using some of the following processes: Oxy-fuel welding (OFW) and cutting, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux cored arc welding (FCAW), and gas

tungsten arc welding (GTAW). Lab required. Prerequisite: Departmental Permit. Corequisite: WLDG 1428. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW)

An introduction to the shielded metal arc welding process. Emphasis placed on power sources, electrode selection, and various joint designs. Additionally, instruction provided in SMAW fillet welds in various positions. Lab required. Prerequisite: Departmental Permit. Corequisite: WLDG 1407. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1430 Introduction to Gas Metal Arc Welding (GMAW)

Principles of gas metal arc welding, set-up and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools/equipment. Instruction in various joint designs. Additionally, this is an overview of terminology, safety procedures, and equipment set-up. Practice in performing T-joints, lap joints, and butt joints using Flux Cored Arc Welding (FCAW) equipment. Lab required. Prerequisites: WLDG 1407 and Departmental Permit. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1434 Introduction to Gas Tungsten Arc Welding (GTAW)

Principles of gas tungsten arc welding (GTAW), including set-up, GTAW equipment. Instruction in various positions and joint designs. Lab required. Prerequisites: WLDG 1407 and Departmental Permit. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 1435 Introduction to Pipe Welding

An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on various welding positions and electrodes. Lab required. Prerequisite: WLDG 1428. Corequisite: WLDG 2443. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in

place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2371 Advanced Welding in Aerospace Applications

Advanced skill development in repair procedures for steel, stainless steel and aluminum materials as applied to American Welding Society (AWS) standards for aircraft and aerospace welding. Includes the selection and application of appropriate methods, materials and equipment for welding, brazing and applied robotics welding. Lab Required. Prerequisites: WLDG 2447 and WLDG 2451. 3 credit hours. (W)

WLDG 2435 Advanced Layout and Fabrication

An advanced course in layout and fabrication. Includes production and fabrication of layout, tools, and processes. Emphasis on application of fabrication and layout skills. Lab required. Prerequisites: WLDG 1317, WLDG 2447, and WLDG 2451. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2440 Advanced Metal Sculpture

Project development in an open-studio atmosphere. Individualized instruction to encourage skill combinations and experimentation. Topics include portfolio preparation and presentation. Lab required. Prerequisites: WLDG 1401, WLDG 1405, and WLDG 1408. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2441 Power Hammer

Skill development in pneumatic, treadle, and trip hammer techniques. Topics include forging various steel alloys and larger stock configurations, tool making, machine care, and hardware. Projects to create functional esthetic objects using power hammers. Lab required. Prerequisite: WLDG 1401. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW)

Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in various positions. Lab required. Prerequisite: WLDG 1428. Corequisite: WLDG 1435. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2447 Advanced Gas Metal Arc Welding (GMAW)

Advanced topics in Gas Metal Arc Welding (GMAW). Includes welding in various positions. Lab required. Prerequisite: WLDG 1430. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW)

Advanced topics in GTAW welding, including welding in various positions and directions. Lab required. Prerequisite: WLDG 1434. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2471 Advanced Metal Casting

Project development in an open-studio atmosphere. Individualized instruction to encourage skill combinations and experimentation. Topics include portfolio preparation and presentation. Lab required. Prerequisite: WLDG 1371. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

WLDG 2480 Cooperative Education - Welding Technology/Welder

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Consent of Associate Dean/Director. 4 credit hours. (W)

Note: Welding classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds repeatedly), reaching, bending, and working around open flames and intense heat for extended periods of time.

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