COLLEGE CATALOG

Western Tech

MAIN CAMPUS

9624 PLAZA CIRCLE EL PASO, TEXAS 79927
Phone 915-532-3737
Toll Free 800-225-5984
Fax 915-532-6946

BRANCH CAMPUS

9541 Diana EL PASO, TEXAS 79924
Phone 915-566-9621
Toll Free 800-522-2072
Fax 915-565-9903

westerntech.edu

WESTERN TECHNICAL COLLEGE LOCATIONS

BRANCH CAMPUS
9451 Diana Drive
El Paso, TX 79924
(915)566-9621 · 1-800-522-2072

MAIN CAMPUS
9624 Plaza Circle
El Paso, TX 79927
(915)532-3737 · 1-800-225-5984

WTC Website Address: www.westerntech.edu

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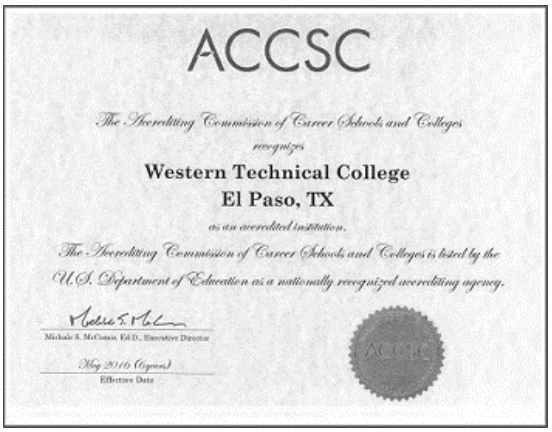

ACCSC

The Accrediting Commission of Career Schools and Colleges

recognizes

Western Technical College

El Paso, TX

as an accredited institution.

The Accrediting Commission of Career Schools and Colleges is listed by the U.S. Department of Education as a nationally recognized accrediting agency.

Michele S. McComis, Ed.D., Executive Director

May 2016 (Expires)

Effective Date

ACCSC


Texas Workforce Commission

Certificate of Approval

Career Schools and Colleges

Western Technical College

(S0118)

9624 Plaza Circle

El Paso, TX 79927

(The original accreditation and licensure documents are displayed at each campus)

Accreditation

Western Technical College (WTC) is accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC) which is listed by the U.S. Department of Education (DoED) as a nationally recognized accrediting agency.

Approvals

WTC is approved and regulated by the Texas Workforce Commission (TWC) Career Schools and Colleges Section, Austin, Texas. WTC's degree-granting programs are approved and regulated by the Texas Higher Education Coordinating Board (THECB). WTC's Nursing Program is regulated by the Texas Board of Nursing (TBON). The Physical Therapist Assistant program is programmatically accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). The Medical Clinical Assistant program is programmatically accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Automotive Technology and Diesel Mechanics are accredited by Automotive Service Excellence (ASE). All programs are approved to train veterans by the Texas Workforce Commission (TWC) and the Texas Veterans Commission (TVC). Training of foreign students is approved by the U.S. Immigration and Customs Enforcement (ICE).

Effective June 18, 2025, the baccalaureate nursing program at Western Technical College at 9451 Diana Drive located in El Paso, Texas, 79924, is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing. This candidacy status expires on June 18, 2027.

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
(404) 975-5000

View the public information disclosed by the ACEN regarding this candidate program on the ACEN's website.

HOURS OF OPERATION

School Operations 7:00 am-10:00 pm
Office Hours: 8:00 am-8:00 pm, Monday through Thursday
Office Hours: Friday, 8:00 am – 4:30 pm

I certify that the information presented in this catalog is correct and true to the best of my knowledge and belief. The contents of this catalog are subject to change without notice

Brad Kuykendall

Brad Kuykendall
CEO
Catalog Volume 1008
Effective June 2025-December 2025

Our Mission

The mission of WTC College is to: Provide quality training and education in a caring, professional environment that prepares new students and working adults with the skills they need to succeed and advance in their chosen careers.

HISTORY

Founded on January 1, 1970, as El Paso Trade School, WTC began with a welding program and gradually expanded its offerings. It added HVAC in 1971 and Automotive Mechanics in 1975. Reflecting its evolving technical focus, the school was renamed Western Technical Institute (WTI) and accredited by NATTS (now ACCSC) in 1979.

Throughout the 1980s and 1990s, WTI launched various programs including Medical Assisting and associate degrees in Electronics, Microcomputer Technology, and Automotive and HVAC. In 2001, the branch campus moved to a modern facility and expanded offerings to include Massage Therapy and split IT into two tracks. The Physical Therapist Assistant program started in 2007, followed by Business Administration (2015) and the first BBA in 2017.

In 2005, the institution was renamed Western Technical College and the addition of new programs that included Diesel Mechanics, Performance Tuner, and Advanced Welding Technology. Automotive Technology was expanded with specializations in Light Duty Diesel and Performance Tuning, which were then taught out in 2014.

Distance education began in 2015, growing to include certificates, AAS, bachelor's, and MBA programs—many offered partially or fully online. WTC introduced hybrid learning in 2017. Over the years, programs like the Bachelor of Science in Nursing, Diesel Advanced Technology, and Commercial Driver Training were added. In 2020, WTC launched its first fully online program, the MBA.

Recent developments include the renaming of the Information Systems and Security program to Computer Science (2023), and a partnership with Ft. Bliss to support military transitions with the new Computer Support Specialist program. The introduction of the Lineworker program was approved in 2023. In May of 2025, WTC discontinued the Diesel Advanced Technology program.

YEAR	PROGRAM	% ONLINE
2015	Medical Billing and Coding-Certificate	20%
2015	General Education Courses	50%
2016	Medical Clinical Assistant-Certificate	20% (Taught Out)
2017	AAS in Business Administration	20% (Taught Out)
2017	Bachelor of Business Administration	50%
2017	AAS in Electronics Engineering Technology	Up to 50%
2017	AAS in Information Systems and Security	Up to 50%
2017	Medical Billing and Coding-Certificate	Up to 50%
2019	AAS in Aerospace and Defense Technology	Up to 50%
2020	Master of Business Administration	100%
2020	Medical Billing and Coding-Certificate	100%
2020	AAS in Information Systems and Security	Up to 100% (Taught Out)
2020	General Education Courses	Up to 100%
2020	Bachelor of Business Administration	100%
2021	Bachelor of Science in Technical Management	100%
2203	AAS in Computer Science	Up to 20%

In April 2017, WTC's main campus was approved to begin offering distance education in a hybrid platform.

YEAR	PROGRAM	% ONLINE
2016	Medical Clinical Assistant-Certificate	20%
2017	AAS in Business Administration	20% (Taught Out)
2017	AOS in Automotive Technology	20%

2017	AOS in Automotive Technology w/Sub-Specialty in LDD	20% (Taught Out)
2017	AOS in Automotive Technology w/Sub-Specialty in PT	20% (Taught Out)
2017	Bachelor of Business Administration	50%
2017	AOS in Diesel Mechanics	20%
2019	AOS in Refrigeration and HVAC Technology	20%
2019	Diesel Advanced Technology Education (DATE)-Certificate	20%
2021	Advanced Welding Technology-Certificate	20%
2021	Commercial Driver Training-Certificate	20%
2023	Commercial Driver Training – Certificate	Discontinued Online Delivery

FACILITIES

WTC occupies two modern campuses designed to enhance learning and provide students with real-world entry-level experience prior to employment. Each campus houses different programs. WTC offers wireless network services throughout each campus so that all students, faculty, staff, and guests of the college can utilize the wireless network.

The Plaza Circle location (main campus) is housed in a 150,000 square foot facility on 13 acres, including spacious indoor and outdoor student break areas. The facility comfortably accommodates classrooms and shops for the following programs: Automotive Technology, Diesel Mechanics, Diesel Advanced Technology Education, Commercial Driver Training, Refrigeration/HVAC Technology, Advanced Welding Technology, Medical Clinical Assistant, FCA MOPAR, and the Bachelor of Business Administration. The main campus features a spacious library with 16 computer stations and a Pearson Testing Center and a restaurant that leases space from the school. The campus has a total of 40 classrooms, including six lab areas for transportation, welding, HVAC, and medical programs. The classrooms can accommodate a maximum of 30 students.

The Diana location (branch campus) is housed in a 48,000 square foot building on five acres with an additional 2,000 square feet outside for a student break area. This campus features program offerings that include a Master of Business Administration; Bachelor of Business Administration; Bachelor of Science in Nursing; Bachelor of Science in Technical Management; and AAS degrees in Computer Science, Aerospace and Defense Technology, Electronics Engineering Technology, Computer Support Specialist and Physical Therapist Assistant. A Certificate of Completion is offered in Medical Billing and Coding. The campus has a total of 26 classrooms and seven labs. This campus a has a spacious library with 10 computers for student use, printing capabilities, and a Pearson Testing Center.

In February 2019 WTC received approval for a satellite campus (SL460566) located 3.75 miles from the main campus to serve as a driving range for the Commercial Driver Training program (CDT) and the Commercial Driver's License (CDL) for the Diesel Mechanics program. In January 2024, the satellite campus was moved to a new location in the Northeast part of the city approximately 20 miles from the main campus. The campus is located at Camp Cohen Public Parking Lot area at 9700 Gateway North, El Paso, Texas.

In December 2023, WTC received approval for the satellite campus (SL560035) located 13 miles from the main campus, at the El Paso Electric Company, 13511 Montana Ave. El Paso, TX 79938 to accommodate the Lineworker program.

EQUIPMENT USED FOR TRAINING

(A more detailed list of equipment used in every program is available online at www.westerntech.edu)

ADVANCED WELDING

Lincoln Electric prism exhaust system
Lincoln Electric V-275 welding machine
Miller Dynasty 200 inverter welding machine
Hypertherm plasma cutter
Miller Bobcat 225 engine driven welding machine
Victor track torches

AEROSPACE AND DEFENSE TECHNOLOGY

Multimeters
Oscilloscopes
Electronic circuit trainers
Avionic systems testers
Time domain reflectometers
Altitude/airspeed testers
Wire harness trainers

Communication trainers
Hydraulic pressure testers

AUTOMOTIVE TECHNOLOGY
ProCut on the car brake lathe
Hunter-Hawkeye Elite alignment system
Launch fuel injector flow tester
Mopar WiTech diagnostic scan system
Matco R134 AC recovery and recharge machine
Mustang AWD-500 dynamometer
MegaTech electrical and hybrid trainers
Mopar training vehicles
Hunter Road force balancing system
Programmable tuning engines

FCA MOPAR
2018 and newer Stellantis Vehicles
2018 and newer powertrain hands-on equipment
Mopar WiTech diagnostic scan equipment
Mopar WiTech Flight recorder
Mopar Picoscope, NVH testing equipment
HP Laptop computers
ATech Electrical Training Boards
Matco 1234yf A/C Recover/Recycle Machine
Midtronic GR8 Battery/charging tester
Stellantis factory special tools and equipment
Matco Hand tools

BACHELOR OF SCIENCE IN NURSING
Hospital beds
Patient simulation mannequins
Blood pressure monitors
Incubators
Autoclaves
Microscope

COMMERCIAL DRIVER TRAINING
4 International Prostar semi tractors 2011
2 International Prostar semi tractors 2014
2 International Prostar semi tractors 2015
2 International Prostar semi tractors 2017
1 Freightliner Cascadia 2017
10 53-footer trailers
Disc brake training system module
Drum brake training system module
2 Air brake system working modules
2 Freightliner Cascadia 2022

DIESEL MECHANICS
Volvotruck trainers
Freightiner truck trainers
Hydraulic fluid power simulators
MegTech electrical trainer
Volvo diagnostic scan system
Daimler diagnostic scan system
Hunter HD alignment system
Hunter HD wheel balancer
Electrical chassis trainer
AC system simulator
Matco R134 AC recovery and recharge machine

ELECTRONIC ENGINEERING TECHNOLOGY
Oscilloscopes
Multimeters
Electronic circuit trainers
Programmable logic controllers
Robotic arms
Pneumatic trainers

COMPUTER SCIENCE
Computers (Blade/Desktop servers, Desktop/All-in-one PCs, Laptops)
Internal/external devices
Storage Technologies
Firewalls, Gateways, NICs
Server and Client operating systems
Cisco Packet Tracer
Installation software (Operating Systems, System Software)
Virtual software (VirtualBox, VMWare, Hyper-V)
Open-Source operating systems

COMPUTER SUPPORT SPECIALIST
Desktop computers
Laptops
Servers
Switches
Routers
Installation Software (Operating Systems, Systems Software)
Virtual Software (Virtual box, VMware, Hyper-V)

PHYSICAL THERAPIST ASSISTANT
Suspension gait system
Open gym area with squat rack
Mechanical traction units
Multiple selection of electrical stimulation and ultrasound units

MEDICAL CLINICAL ASSISTANT
EKG machines
Microhematocrit machines
CLIA wave testing machines
Exam Tables
Phlebotomy patient chairs
Centrifuges
Autoclaves

Microscopes
Peritoneal Dialysis Catheter
Permanent catheter practice models
Electronic health record simulator

REFRIGERATION/HVAC TECHNOLOGY
Residential split systems
Light commercial package units
Ductless mini-split systems
Chilled water system
Commercial package units
Electrical training stations
Ice machines (cube, nugget, flaker)
Building automation/energy management trainers
Heat pumps

LINEWORKER
Body Belt
Pole Climbers (Gaffs or Spikes)
Pole Straps/Positioning Lanyards

Medical Billing and Coding, Bachelor of Science in Technical Management, Bachelor of Business Administration, and Master of Business Administration Fully online programs do not require specific equipment for training.

ADMISSIONS

Admission Standards
The applicant understands that they must satisfy any specific admission requirements for the programs that are described in the school's catalog and that they will not be fully admitted to WTC until all admission requirements have been fulfilled to WTC's satisfaction. The applicant specifically affirms that they have earned a high school diploma, General Equivalency Diploma, or the equivalent and authorizes WTC to verify authenticity. The applicant acknowledges and agrees that they must comply with all admissions requirements and submit all proper documentation in the time allotted by WTC and that a failure to meet any admission requirement or failure to submit any documentation may result in denial of acceptance into the chosen program.

Admission Procedures
Individuals who seek admission to WTC are interviewed by an Admissions Representative. The pre-admission interview is designed to determine whether the applicant has a reasonable chance to complete the chosen program of study. The purpose of the interview is to accomplish the following:

1. Assist prospective students in identifying the appropriate area of study
2. Provide detailed information concerning curriculum offerings
3. Discuss support services available at WTC
4. Tour the facility

Prospective students will tour the campus as part of the enrollment process, and they will complete the necessary forms and documents prescribed by the college and its regulating and accrediting bodies. Arrangements for an interview and tour of WTC may be made by contacting the Admissions Department.

Prospective students interested in fully online programs will be provided with a virtual tour of the campus as part of the enrollment process, and they will complete the necessary forms and documents prescribed by the college and its regulating and accrediting bodies. Students will not be able to enroll after the second day of the schedule start of class.

Statement of Non-Discrimination
No person shall be excluded from participation, denied any benefits, or subjected to any form of discrimination based on race, sex, religion, color, national origin, age, disability, military or veteran status, gender identity, or any other factor protected by law.

WTC does not discriminate in admission or access to programs based on any characteristic protected by law, including disabilities. People with disabilities are eligible for admission if they can carry out classroom, laboratory, and internship assignments; pass written, oral, and practical examinations; and meet all the requirements of the program and generally accepted requirements of the profession with or without reasonable accommodation. WTC will make reasonable accommodations for disabilities. Applicants who require accommodations are required to submit a written request to the

campus president prior to enrolling and may be asked to provide medical documentation. Technical Standards and Essential Functions are listed in every program section in this catalog.

Admission Requirements

To be eligible for any program offered by WTC, a prospective student must present a high school diploma, high school transcript, or equivalency certificate (GED) recognized by the United States Department of Education. The admissions representative will make a copy to keep on file. In the event the applicant is unable to produce a copy, WTC will submit a transcript request on behalf of the applicant to their previous school at no cost to the applicant, or the applicant can submit their own request.

Classes are taught in English; therefore, an adequate level of proficiency in reading, writing, and speaking the English language is required. Prospective international students are required to take the Test of Adult Basic Education (TABE) CLAS-E and must achieve a minimum NRS Level 4. All applicants must be at least 18 years of age or older; however, applicants who have already earned their high school diploma, GED, or high school equivalency may enroll if they have met their state's compulsory age requirements or have exemptions.

Commercial Driver Training Admission Requirements

Applicants who are unable to produce a high school diploma or GED are required to take the Wonderlic Basic Skills Test (WBST), and they must score a minimum of a seventh-grade level on Verbal Skills, Quantitative Skills, and Skills Composite assessments to qualify for enrollment in the program. If the applicant does not achieve the required scores, they may elect to re-take the Wonderlic exam. An applicant may take a second WBST on the same day; however, a substantially different test will be administered. Those wishing to make a third attempt may do so not less than one week after the second attempt. Those wishing to re-take the exam after the third attempt must wait six months before their fourth attempt. If a student does not pass a section, they must re-take only the section they did not pass.

Wonderlic Cut-Off Scores

- Verbal Skills: 211-229 is at seventh grade level
- Quantitative Skills: 227-240 is at seventh grade level
- Skills Composite: 211-229 is at seventh grade level

Additional requirements include:

1. Applicants must undergo a background check that includes the driving record. Felony charges will prevent the DMV from issuing a CDL. Candidates should check with an admissions representative for the list of those charges before choosing to take this program.
2. Applicants must possess a clear driving record and background check with the following stipulations:
    a. No DWI or DUI in the past three (3) years
    b. No careless or reckless driving in the past three (3) years
    c. No more than three (3) moving violations in the last two (2) years.
    d. No drug- or alcohol-related misdemeanors during the previous three (3) years
    e. No felony convictions in the last five (5) years
    f. No drug or alcohol related felonies within the past ten (10) years
    g. No felony parole or probation within the past two (2) years
    h. No felony charges pending. Students may reapply after their case has been adjudicated.
3. Applicants must undergo and pass a Department of Transportation (DOT) physical that includes vision testing and drug testing. A positive drug test, if deemed valid after review by a designated medical officer, will result in the student being ineligible for training. Applicants must provide the WTC admissions representative with the results.
4. Applicants must be fingerprinted and have a photo taken.
5. Applicants must release permission to the school to obtain a verifiable Motor Vehicle Report (MVR). For non-residents, or in cases where the school cannot accept MVR's, the applicant must obtain one (1) pre-hire prior to enrollment.

Note: Individuals who have gone through the training for the CDL but were unable to obtain a CDL for failure to produce any of the items or pass any of the tests listed above or if they fail their driver's test will be charged for the entire program. Graduates from this program may transfer their credential towards the Diesel Mechanics AOS degree program for the full 96-hour course exemption.

The Texas Department of Motor Vehicles has published requirements for applicants interested in obtaining a Commercial Driver's License (CDL) and the Diesel Mechanics students taking the CDL course:

1. Applicants must be a minimum of 18 years of age for intrastate licensing for Texas and New Mexico.
2. Applicants must be a minimum of 21 years of age for interstate licensing for Texas and New Mexico.
3. Applicants must possess a valid driver's license from the USA for at least six (6) months prior to their admission into the program.
4. Applicants must meet the requirements of the Motor Carrier Federal Regulations, Part 391.11(b)(2) which states that drivers "must read and speak the English language sufficiently to converse with the general public, and to understand traffic signs and signals in English."
5. Applicants "must provide to the State proof of citizenship or lawful permanent residency" per 49 CFR 383.71 with proof such as either of the following: a. Social Security card or proof of the number b. Another document such as a birth certificate or green card.
6. Applicants for a Texas CDL must be a Texas resident for at least 30 days and have vehicle registration.
7. The applicant cannot possess more than one (1) license and cannot have had their driving privilege suspended in any state nor have any unpaid traffic tickets in any state.
8. Applicants testing in Texas from out of state must report back to their home state to pick up their Commercial Driver's license.

The following is a list of charges for the CDT program that must be paid by the applicant before they will be allowed to enroll in the program. Proof of said requirements must be provided to the WTC Admissions Representative prior to enrollment.

DOT Physical (May vary per location)	$60
DOT Criminal Background/Urinalysis and drug screen	$45
Driving Record (MVR)	$12
CDL Permit and License Fee	$98
Total	$215

Note: Prices are approximate and may vary per location

Computer Support Specialist Admission Requirements

Applicants must be within 180 days of ETS (Estimated Time of Separation) and have the Army required appointments and classes complete. Applicants must get approval from their chain of command through the Army required forms:

- Agreement for Army Career Skills Program Individual Internship/Approved DoD Skill Bridge Program. (Must be completed by their official legal team)
- Soldier Participation Memorandum-Army Career Skills Program (must be signed by their company commander, battalion commander, and approved TAP (Transition Assistance Program) coordinator.

The program director will interview applicants to assess their knowledge, skills and IT experience. WTC will require prospective students to take a comprehensive entrance exam to assess basic IT knowledge skills.

Lineworker Admission Requirements

To be admitted into a lineworker program applicants must pass a criminal background check, A10 panel drug test, and undergo on HP E heavy performance evaluation. Lastly they will have to take a pole assessment evaluated by EP Electric facilitators or WTC program director.

FCA MOPAR Admission Requirements

Applicants must be within 180 days of ETS (Estimated Time of Separation) and have the Army required appointments and classes complete. Applicants must get approval from their chain of command through the Army required forms:

- Agreement for Army Career Skills Program Individual Internship/Approved DoD Skill Bridge Program. (Must be completed by their official legal team)
- Soldier Participation Memorandum-Army Career Skills Program (must be signed by their company commander, battalion commander, and approved TAP (Transition Assistance Program) coordinator.

To be accepted into the FCA Mopar Automotive Certificate program, a prospective student must possess a valid driver's license before being allowed to start class.

Applicants must complete the pre-entrance assessment, which will be used in conjunction with a face-to-face interview conducted by the program coordinator. The final decision will be based on the interview recommendation.

MCA Admission Requirements
Applicants requesting entry into the Medical/Clinical Assistant program must demonstrate a typing proficiency of 35 WPM with 98% accuracy. Applicants who achieve fewer than 35 WPM and 98% accuracy, but not fewer than 20 WPM with 95% accuracy, are allowed entrance into the MCA program provided they are able to elevate their typing speed to 35 WPM with 98% accuracy before they enter an internship. Applicants must adhere to the typing remediation requirements of the program.

MCA Immunization Requirements:

1. Tetanus (Td or DTP): Tdap, One immunization within the past 10 years.
2. Measles, Mumps, Rubella (MMR): Two inoculations from childhood should be shown on the records. If only one is shown, then a recent inoculation as an adult must also be shown. If none from childhood can be shown, then one as an adult is acceptable. Proof of immunity may also be shown by the positive titer result.
3. Varicella Titer (also known as chickenpox): Two inoculations given four weeks apart or provide proof of immunity by the positive titer result.
4. Hepatitis B (Hep. B): A series of 3 injections. Injection #1 is given, #2 is given 30 to 60 days after injection #1. Injection #3 is given 4 to 6 months after #2. If the person waits too long between any of the injections, they may have to begin the entire series over again. Proof of immunity may also be shown with positive titer results.
5. Tuberculosis Skin Test or Chest X-Ray (TB, PPD). If the student tested positive to the skin test or is allergic, they must show proof of a current negative TB result (less than one year).

MCA Additional Requirements: Expectant mothers may be required to provide a physician's written clearance allowing them to receive immunizations and TB testing.

Note: MCA requires all immunization to be completed prior to starting the program.

Automotive Technology, Refrigeration and HVAC Technology and Diesel Mechanics Admission Requirements
A prospective student must possess a valid driver's license before being allowed to start class.

VOLVO/ MACK Truck-DATE Program:
To be eligible to participate in the Volvo/Mack Truck DATE courses the student must meet the following criteria:

1. Have and maintain a 3.0 or higher cumulative GPA throughout the Diesel degree program.
2. Have and maintain a 97% or higher attendance rate throughout the Diesel degree program.
3. Submit a written application to attend the Volvo/ Mack Truck DATE courses during their ninth basic core course.
4. Pass the application interview during their tenth basic core course and be accepted.
5. Possess a valid driver's license.

Aerospace and Defense Technology Admission Requirements
Applicants will be required to sign an attestation acknowledging that they do not have a criminal background. Having a criminal background may disqualify the applicant during the hiring process. In most cases, applicants must be able to pass a security clearance as a requirement for employment. Students accepted into the program must be physically, mentally, and emotionally capable of completing the program.

Physical Therapist Assistant Admission Requirements
The licensed Physical Therapist Assistant (PTA) is a healthcare professional who works under the supervision of a licensed Physical Therapist. The Physical Therapist Assistant will implement treatment based on the established plan of care and treat a variety of patient populations from pediatrics to geriatrics.

WTC has developed an application process for the PTA program that is intended to be non-discriminatory and objective. The criteria noted in the point summary sheet from which the applicants are selected is irrelevant of race, color, national origin, sex, disability, age, veteran status, religion, or any other protected status. In order to ensure optimal objectivity with the interview process, the following measures are taken: all applicants will be interviewed utilizing the same set of predetermined

questions; sit for a panel consisting of three (3) members, (including a practicing clinician not affiliated with WTC); be assessed with a grading system that is based on the "Generic Abilities" developed by the Physical Therapy program, University of Wisconsin-Madison, May et al, *Journal of Physical Therapy Education* 9-1, Spring 1995.

Admission to the PTA program is a selective process. It is a competitive process, and all applicants will be ranked based on a point system. Therefore, application to the program does not guarantee admission into the program. Enrollment of PTA students is limited to a maximum of 24 students each year. The "point system" will take into consideration educational credentials; grade point average; Wonderlic Scholastic Exam score; Observation/Experience Hours (minimum of two clinical settings); onsite essay; letters of recommendation, and panel interview.

Admission to the PTA program begins with a meeting with a WTC admissions representative. At that time, the prospective student will be informed about the expectations and qualifications necessary for admission into the program, including the need for immunizations; volunteer hours; background check; physical examination by a licensed health practitioner (M.D., D.O., P.A., or A.R.N.P.); CPR certification; and an admissions panel interview. This information is also posted on the college website. Students accepted into the program must be physically, mentally, and emotionally capable of completing this program.

The PTA admission process will be completed as follows:

1. Wonderlic score of a minimum of 20. This test will be administered when meeting with your admissions representative. Applicants must complete the Wonderlic before starting to submit their application requirements. Only three attempts will be allowed to meet the minimum score.
2. Show a minimum of 50 volunteer/observation hours meeting the following criteria: Total hours must include a minimum of two different settings and may include these: acute care, outpatient clinic, rehabilitation facility, educational therapy setting, home health therapy, and/or long-term care facility.
3. Two letters of recommendation from an appropriate source, e. g., previous employers, teachers, instructors/mentors. Not acceptable are family members, friends, colleagues. A minimum of one letter of recommendation from a clinical practitioner is required.
4. Arrange for an official transcript that must be submitted DIRECTLY from the post-secondary institution to WTC and on to the program director (see the application for details). The transcript must show a minimum of 2.75 GPA in secondary or post-secondary education (or minimum score of 500 for those applying with a GED).
5. Applicants must submit the completed application package by the deadline date. Applicants whose applications are incomplete and/or late (postmarked or delivered in person) must reapply for the next application cycle.
6. Applications are screened and those who submit complete applications that meet the minimum requirements will be invited to a panel interview. A brief on-site essay will be required. The applicant will be sent a letter of receipt informing them of any missing documents and/or failure to meet any criteria with a reminder of the deadline date for completing the application.
7. The PTA selection committee will summarize the final applications and choose the students for the incoming class. Accepted students will be notified via mail and given a deadline to accept the position and will be required to have all necessary immunizations; a physical examination done by a physician, or other healthcare provider; CPR certification; and completion of a criminal background check done at the applicant's expense.
8. Alternate student and denial notifications will be sent by mail. An up-to-date shot record, (to include TB test and Hepatitis vaccine); at least one of the series initiated for the Hepatitis B series vaccine are required prior to admission, and the completed series completed prior to the first clinical rotation.

Note: All prerequisites listed must be completed prior to the start of the class. Even if a student is enrolled, the individual cannot begin participating in class until all prerequisites are completed.

PTA Immunization Requirements:

If an immunization record is provided that shows this series, a titer's test will still be required to prove immunity for Hep B, MMR and Varicella.

1. Tetanus (Td or DTP): Tdap, One immunization within the past 10 years.
2. Measles, Mumps, Rubella (MMR): Two inoculations from childhood should be shown on the records. If only one is shown, then a recent inoculation as an adult must also be shown. If none from childhood can be shown, then one as an adult is acceptable. Proof of immunity may also be shown by the positive titer result.
3. Varicella Titer (also known as chickenpox): Two inoculations given four weeks apart or provide proof of immunity by the positive titer result.

4. Hepatitis B (Hep. B): A series of 3 injections. Injection #1 is given, #2 is given 30 to 60 days after injection #1. Injection #3 is given 4 to 6 months after #2. If the person waits too long between any of the injections, they may have to begin the entire series over again. Proof of immunity may also be shown with positive titer results.
5. Tuberculosis Skin Test or Chest X-Ray (TB, PPD). If the student tested positive to the skin test or is allergic, they must have proof of a current negative TB result (less than one year).
6. COVID exemption will be accepted for review by clinical sites.

Wonderlic Scholastic Exam SLE

The Wonderlic Scholastic Exam (SLE) is administered to applicants to the Physical Therapist Assistant program. If the applicant does not achieve the required scores for the program, they may elect to re-take the exam. Students who take the SLE may take the test and a re-test on the same day. Those wishing to make a third attempt must do so within one to two weeks after the second attempt. Those wishing to re-take the exam after the third attempt must wait six months before their fourth attempt. The applicant will also complete a student survey as part of the Wonderlic exam. The survey results are forwarded to the program director for information only.

WTC Success Initiative Program (WTSI)

Students entering the PTA Program are required to take a college-readiness assessment (WTSI assessment). This assessment is designed to measure a student's skills in relation to a standard of competence in mathematics, reading, and writing, and is offered during regular business hours.

All new and transfer students who have taken an assessment based on the Texas Success Initiative (TSI) at another institution and have met the standard requirement from their previous post-secondary institution are exempt from the WTSI. Those who do not qualify for an exemption must take the WTSI assessment. Any non-exempt student enrolling or transferring into WTC is required to meet the standards of the WTSI in the areas of reading, writing, and mathematics, and the work must be completed by the end of the first semester. Students not meeting the minimum standard requirements in reading, writing, and mathematics must complete developmental education to meet the requirements of the WTSI Program. Students will receive strengthening in any areas of deficiency to complete the necessary requirements for the WTSI. Any fees associated with the WTSI process are included with the published tuition and fees at WTC.

Bachelor of Nursing Admission Requirements

1. The applicant must be at least 18 years of age at the time of start of the program.
2. The applicant must have a clean criminal background check.
3. Official high school transcripts must come directly from the high school, showing a 2.75 CGPA or higher, and sent to the Admissions Department to process the application. Prospective students may present a copy of their high school transcript to the admissions representative for initial evaluation, but the application will not be processed until an official transcript is received.
4. A GED will be accepted in lieu of a high school transcript.
5. Completion of 12 semester credit hours or more from an accredited post-secondary college with 3.0 GPA will be accepted in lieu of high school transcript.
6. Applicants must achieve a minimum score of 60% in Reading, 60% in Mathematics, 60% in English, and a minimum of 50% in Science on the Test of Essential Academic Skills (TEAS). Applicants may register to take the TEAS exam at www.atitesting.com.
7. The applicant must be able to satisfy, with or without reasonable accommodation, the physical, mental, and sensory requirements listed in the student health form.
8. The applicant must present a complete health clearance from a healthcare provider.
9. The applicant must present a drug screen test with a negative result.
10. Applicants must sit for a panel interview.

The ATI TEAS consists of 170 questions in a multiple-choice format with four-option answers. Questions are designed to test the basic academic skills the tester will need to perform in class in the areas of: Reading, Mathematics, Science, English, and language usage. The total score is an adjusted percent correct score, which ranges from 0.0% to 100%. It is an equated score generated by the information from the entire set of 150 scored questions. The Dean of Nursing ranks applicants based on qualifying (TEAS) scores and makes the selection decisions for admission. Admission will be denied to an applicant who fails to meet all admission requirements, and the school documents the basis for denial. A candidate who does not have a clear

criminal background check as described by the Texas Board of Nursing will be sent a letter of denial of acceptance. The applicant must complete the eligibility process prior to admission.

Upon successful completion of all admission requirements, the school will promptly notify the student whether they are admitted to the nursing program. If the number of qualified applicants for admission into the program exceeds the space available, applicants will be ranked based on the composite score each received on the TEAS Exam. Students who are accepted into the nursing program must meet the requirements established by the nursing program's admission policy. Applicants must comply with all required eligibility information and policies of TBON Rule 215.8 to be accepted into the nursing program.

All applicants must successfully complete the Test of Essential Academic Skills (TEAS) exam to be considered for admission.

BSN Immunization Requirements

Immunization requirements are based on the Centers for Disease Control and Prevention (CDC) immunization recommendations for health-care workers. Student and faculty exceptions to the immunization policy will be determined by the student/faculty primary health care provider documentation and consultation with the clinical agency.

The following is a list of necessary immunizations for all nursing students attending the nursing program. Proof of immunizations or positive titers must be documented in the student record and may be reflected in a shot record, physical examination report, lab report, or a letter from a health care provider. The record statement should include shot records, physical examination report, and immunization lab report. All immunizations will be completed prior to the start of upper division nursing courses. WTC complies with all state health care provider laws and regulations.

1. Tetanus (Td or DTP): One immunization within the past 10 years.
2. Measles, Mumps, Rubella (MMR): Two inoculations from childhood should be shown on the records. If only one is shown, then a recent inoculation as an adult must also be shown. If none from childhood can be shown, then one as an adult is acceptable. Proof of immunity may also be shown by the positive titer result.
3. Varicella Titer (also known as chickenpox): Two inoculations given four weeks apart or provide proof of immunity by the positive titer result.
4. Hepatitis B (Hep. B): A series of 3 injections. Injection #1 is given, #2 is given 30 to 60 days after injection #1. Injection #3 is given 4 to 6 months after #2. If the person waits too long between any of the injections, they may have to begin the entire series over again. Proof of immunity may also be shown with positive titer results.
5. TB test (QuantiFERON TB Gold in-Tube and Tuberculosis Skin Test or negative Chest X-Ray (TB, PPD): Skin test results or chest x-ray result prior to the start of the upper division courses. If the student tested positive to the skin test or is allergic, they must show the results of a negative chest x-ray. Students must provide a current negative TB result annually.
6. Seasonal flu shots.
7. COVID exemption will be accepted for review by clinical sites.

Should the student be allergic to any of the above immunizations, they must provide a letter from a physician stating this. Students who are pregnant or with certain health conditions should not be immunized, therefore it is imperative that students provide a letter to the school from their attending physician with this information.

Additional immunizations or health screenings may be required to meet clinical agency requirements. Students are responsible for keeping their original immunization record and providing the clinical coordinator with a copy for their student record prior to the start of clinicals.

Bachelor of Science in Technical Management Admission Requirements

To be eligible for enrollment into the Bachelor of Science in Technical Management completion program, a prospective student must have earned an associate's degree recognized by the United States Department of Education. Prospective students with an earned associate of applied science (AAS) or associate of science (AS) with 15 general education credits can enter the program with no additional prerequisites. Prospective students with an earned associates of occupational science (AOS) degree must take additional courses to complete 15 required general education credits prior to enrollment. The required 15 credits of general education courses include ENGL 1301, SCOM 1315, MATH 1312, a science course, and PSYC 2301. **Note:** Prospective students can be awarded exemption credits based on related work experience**.**

Master of Business Administration Admission Requirements

To be eligible for enrollment into the Master of Business Administration program, a prospective student must have earned a Baccalaureate degree recognized by the United States Department of Education. For a candidate to be considered, an official transcript must come directly from a college or university and be sent to the Admissions Department. Prospects are also required to write a letter of interest that will be reviewed by a committee. This letter will be used to evaluate a prospect's level of interest in the business program, learn about the prospect's goals after earning their degree, and to ensure their success. The letter may also identify any problems that may keep the prospect from completing the program. Appropriate resources may be recommended, and any areas of concern will be addressed. In addition, the prospect will be required to sit for a virtual or face-to-face interview with a school representative(s) for introductions and to ensure that program expectations are clear.

For Prospects with International Transcripts

If the institution which the applicant previously attended is in the United States, it must be accredited by an accrediting agency recognized by the United States Department of Education. Transcripts in Spanish from Puerto Rico or other United States territories are acceptable. If the institution is outside the United States, it must be accredited or similarly acknowledged by an agency deemed acceptable at WTC's discretion. To determine high school equivalency of foreign transcript credentials, WTC may also require, at the applicants' expense, an evaluation conducted by an independent third party.

For Prospects Unable to Produce a High School Diploma or GED

In the event the prospective student experiences a problem acquiring their high school diploma or GED, WTC will make allowances provided that one of the following criteria is met:

1. The prospective student is required to produce a transcript from the post-secondary institution attended. The college or vocational training institution must be recognized by the U.S. Department of Education and must be an accredited institution. If the prospective student did not complete the program, they would be required to possess a minimum of (24) semester credit hours or equivalent of post-secondary training at a national or regionally accredited institution. The individual is required to submit transcripts with a minimum 2.0 cumulative grade point average. This does not apply to military Joint Services Transcripts (JST) from any military branch. Transcripts for high school equivalency are not required to be official.
2. The prospective student can produce an official military service DD214, and high school seniors can submit their most current partial transcript that indicates their expected graduation date.
3. For applicants who were home schooled, may be eligible for enrollment, provided their transcript meets equivalency standards with state requirements. Given that homeschool requirements and regulations vary by state, WTC requires that the applicant provide a homeschool transcript (course dates, titles, a course grade or performance assessment for each course, period of enrollment with graduation date or expected graduation date); and supporting documentation that the curriculum follows state requirements for secondary education.

Fully Online and Hybrid Delivery

At WTC, hybrid and fully online courses are delivered via Canvas, our Learning Management System (LMS). Canvas provides both synchronous and asynchronous tools to support online learning, including discussion boards, chat sessions, live conferences, case studies, lab simulations, and quizzes.

In hybrid programs, students attend scheduled in-person sessions while completing online coursework at their convenience each week. Fully online students complete all coursework online, with activities assigned on a weekly basis.

Regardless of the format, all students receive the same level of support as on-campus learners, including tutoring, technical assistance, career preparation, job lead assistance, and library access.

Active participation is essential for success. Fully online and hybrid students must have reliable Internet access outside of school and be comfortable using technology, as students may spend a good amount of their class time online. WTC provides the minimum computer requirements needed for their program. As part of their book and tools, hybrid students are provided with a laptop that meets the requirements for their program.

Before enrolling in a hybrid or fully online program, prospective students must complete a "Readiness Assessment" to evaluate their readiness for online learning, technology proficiency, and cognitive ability. Students may receive training tailored to their identified needs to help them navigate the Learning Management System and online delivery effectively. Additional support is available in Foundations, the first course in their program, for those who need extra technical strengthening. Scoring and placement for the readiness assessment are as follows:

Online Program (25 Questions)

- 15–25: Ready to enroll.
- 10–14: Must complete Online Pre-Enrollment Orientation.
- 0–9: Must attend Pre-Enrollment Workshop.

Hybrid Program (20 Questions)

- · 10–20: Ready to enroll.
- · 0–9: Must attend Pre-Enrollment Workshop

Certificates and Degrees

WTC offers associate and baccalaureate degrees. The academic associate degree is an Associate of Applied Science (AAS). The other associate degree is an Associate of Occupational Studies (AOS). Both prepare students to enter their chosen fields. While the certificate programs are non-term and do not result in a degree, they do provide a Certificate of Completion that attests to the students' skillset.

Restarts

Students who have dropped from the college may request to restart their program of study after sitting out one term. Students that have a balance owed to the school must pay the balance or make acceptable arrangements with student accounts. The student loans department will also need to provide clearance for students to restart. Once students have approval from the student accounts and student loans departments, a letter needs to be submitted to the campus president, specifically explaining the following:

- What variables prevented them from completing their program
- What has been done to correct the issue(s)
- What the college expects from the individual if they are allowed to return

Once approved by the campus president, students will need to visit the student financial service department.

Students who return after termination of enrollment will be placed on restart probation for the next grading period and the student will be advised that this action will be documented in the students' file. If students do not demonstrate satisfactory progress at the end of the probationary period, the student's enrollment will be terminated. Students terminated from the school due to misconduct who are not in good standing with the school may not re-enroll into any program offering at WTC. Students may appeal the decision, and that process is found under the Appeals section of this catalog.

Effective February 1, 2019, any student who drops from school and decides to return will be charged tuition at the rate in place at the time of return.

Students are encouraged to complete their programs in a timely manner. Students will be allowed to restart the same program only once. Any mitigating circumstances for additional re-entries need approval from the campus president.

BSN Program Restart Policy and Process

In addition to the requirements outlined above, a request must be made within two (2) consecutive semesters (32 weeks) of the course dismissal. A student may be denied readmission to any course or the WTC BSN program. Readmission will be contingent on space availability and after having met admission's criteria. All students requesting readmission will undergo drug testing. Failure to do so will result in non-acceptance to the program.

To apply for readmission to the Western Tech BSN program, the student must meet with an admissions representative. After it has been determined that the student meets admissions criteria, an interview must be scheduled with the Admissions/Progression/Graduation Committee, which includes the dean and associate dean of nursing. The student will be allowed to perform a clinical skills proficiency assessment including a head-to-toe assessment, IV insertion, medication administration nasogastric tube insertion, and dosage calculation(list not all inclusive) with 2 attempts. If unsuccessful the first time, the student will be required to remediate with a faculty member and allowed one more attempt. On the second attempt, if the student is still not proficient in one or more skills, they must practice with a lab coordinator until they are judged competent in those skills. A student who returns after termination of enrollment for unsatisfactory progress will be placed on academic probation for 16 weeks. Readmission will be based on the nursing program selective admission criteria. Upon admission, the student must agree to the stipulations in the Academic Support Plan (ASP). A student who fails to comply with contractual obligations found on the ASP on more than three occasions will be permanently dismissed from the program.

INTERNATIONAL STUDENTS

WTC is dedicated to serving the needs of the international student from the admission application process through transfer or graduation. Staff members are available to help students remain in compliance with Department of Homeland Security requirements while attending WTC. For the convenience of students, designated advisers are available.

How to Obtain a SEVIS I-20 Form

International students wishing to live in the United States while attending college must be admitted as full-time international students and maintain a full-time course load to stay in compliance with F-1/M-1 Visa requirements. Applicants seeking to enroll in valid student non-immigrant status must submit each of the following items:

1. A completed application for admissions.
2. A completed and signed enrollment agreement.
3. Original or official copies of educational transcripts (secondary school and, if applicable, university-level academic records) and diplomas. These educational transcripts and diplomas must be prepared in English or include a complete and official English translation. WTC will perform this function on behalf of the students who will assume the cost for the translation. The translation is generally completed within five to seven school days.
4. Transcripts from Puerto Rico are accepted.
5. Official evaluation of non-American educational credentials. The official transcript is translated by an approved independent third party.
6. Proof of English language proficiency. A TABE CLAS-E test will be administered and must meet a minimum of NRS Level 4.
7. A completed and signed Sponsor's Statement of Financial Support (This statement is not required if the student is self-sponsored.).
8. Official financial statements (typically provided by a bank) must verify sufficient funds to cover the cost of the educational program as well as living expenses.
9. A photocopy of the student's passport to provide proof of birth date and citizenship (Students outside the United States who have not yet acquired a passport must submit a copy of their birth certificate.).
10. Non-immigrant applicants residing in the United States at the time of application will be required to provide a photocopy of the visa page found in the student's passport as well as a photocopy of the student's I/94 arrival departure record (both sides).
11. Nonimmigrant applicants residing in the United States at the time of application in F, M, or J nonimmigrant classification must provide written confirmation of nonimmigrant status from a school attended before they transfer to WTC.

Issuance of the I-20 Form General Information

The I-20 form is issued in compliance with The Department of Homeland Security rules and the General Issuance Guidelines.

1. The I-20 form will be issued no earlier than 60 calendar days prior to first day of the program start for which the prospective student applied.
2. The I-20 form will generally be issued no later than 30 days prior to the first day of the program start for which the prospective student applied.

Sevis I-20/M-1 Visa Requirements

After receiving the SEVIS, I-20 form, and F-1/M-1 Visa, the candidate must comply with the following requirements:

1. Report to WTC's Student Financial Services Office within 10 days of entering the United States for the first time on the F-1/M-1 Visa.
2. Report changes to address and telephone number(s) to the Student Financial Services Office within (10) days. Report to the International Students Office to report any schedule changes that might result in an out-of-status condition, e.g., withdrawing from a class resulting in less than full-time attendance.
3. To extend an I-20 Form, report to the Student Financial Services Office for an extension four weeks prior to the expiration date. If the I-20 is not extended or renewed prior to the expiration date, it will be terminated, and the individual will not be allowed to continue to study after the expiration date and must leave the United States and re-apply for a new I-20 and a new F-1/M-1 Visa.

The student must contact the Student Financial Services Office immediately if they plan to transfer to another college or university. Another school will not be able to issue an I-20 unless WTC first releases the SEVIS record.

TRANSFER CREDITS

Transfer credit for previous education, training, military, or work experience must be evaluated by the campus president and acceptability determined prior to an applicant's being accepted and starting school. The following guidelines will be applied.

1. General education courses completed over the last ten (10) years with an earned grade of "B" or higher.
2. Applied General Education course exemptions can be considered only for AOS degree programs.
3. Apart from the PTA and BSN programs, students who have completed technical courses over the last five (5) years may be entitled to course exemptions provided they earned a "B" or higher.
4. Effective January 1, 2019, alumni who wish to take an entire program different from the one they graduated from may do so for up to 50% off tuition for ONE PROGRAM ONLY. Alumni who enroll in a subsequent program must be in good standing with WTC, to include zero conduct issues with their previous program and good standing with their student loans and student accounts. Detailed information on the alumni discount is found in the Financial Aid section of this catalog. Regardless of transfer credits and/or alumni credit, the tuition discount will not exceed 50% of the tuition cost.
5. The acceptance of transfer credit for technical courses is primarily based on the competencies achieved by the applicant in previously completed coursework, training, or employment that reasonably aligns with WTC coursework. Applicants may be required to provide course descriptions from the school where the coursework was taken to enable WTC to perform a course-by- course evaluation.
6. WTC may require applicants requesting transfer credit to take oral, written, or performance exams or a combination thereof. Applicants must achieve a minimum score of 75% on the exam(s) for course exemption.
7. WTC does not accept credits listed as "transfer" credits on transcripts from other institutions. Original transcripts are required for coursework from all institutions previously attended.
8. Students receiving course exemption(s) are not eligible to receive Title IV or VA funding for any coursework for which the student already received credit.
9. A minimum of 50% of credits earned for graduation must be earned at WTC.

High School Credit

A high school graduate may be eligible for credit from previous training in high school up to one year of graduation. The student must receive an 80% or higher on the articulated course(s) for credit purposes, and they must be upper division courses. The credit may result as a course exemption or a reduction in the cost of the course. The final determination is made by the program director and campus president.

Evaluation of Transfer Credit for Veterans for Previous Military Experience and Education

WTC strives to accelerate veterans' entry into the workforce. For this reason, skills obtained through military experience, education, and training are considered for the awarding of credit.

Veterans will be required to present the following:

1. Joint Services Transcript (JST). (WTC's VA Certifying Official can also order a JST transcript on behalf of the veteran.)
2. DD214
3. Any post-secondary transcripts from previous education training and/or education

WTC will consider granting credit for coursework, certifications, and military or work experience only for specified activities based on an evaluation of the student's skills. The school will require applicants requesting transfer credit to take oral, written, or performance exams or a combination thereof, and applicants must achieve a minimum score of 75% on the exam(s) for course exemption. Other tools at the school's disposal are the Classification of Instructional Programs (CIP) codes and the military occupations codes (MOC). Matching codes may result in an award of course credits that align with the program of interest. Veteran applicants who receive credit are not eligible to receive Title IV student financial assistance or Veterans Administration (VA) funding for any coursework for which credit was granted. They may receive student financial assistance or VA funding for all other coursework at WTC contingent upon their eligibility.

Transfer Credit for Students Entering the Physical Therapist Assistant Program

Applicants who wish to have their previous education considered for credit must do so prior to being accepted and prior to starting the PT A Program. Students who took general education coursework over the last ten (10) years may be given credit

provided that the grade(s) earned are a "B" or higher and the course objectives match what is required for the PTA program general education courses. No credit will be granted for core PTA courses

Transfer Credit for Students Entering the Bachelor of Science in Nursing Program
Applicants who wish to have their previous education considered for credit must do so prior to being accepted and prior to starting the program. Students who took general education coursework within the past (10) years, may be considered for transfer credit provided that the grade(s) earned are a "B" or higher.

Students must take nursing-related science courses; A & P I/II, Microbiology, Chemistry, and Pathophysiology at WTC. Algebra (General Ed course) must also be taken at WTC. Students may apply to take a readiness exam for Chemistry and/or Math for credit if they score an 85% or higher on a comprehensive exam. These exams must be scheduled with admissions and taken prior to starting the program.

Transfer Credit for Students Entering the Medical Clinical Assistant Program
Any transfer credit considered must come from an institution accredited by Commission on Accreditation for Allied Health Education Programs (CAAHEP) and meet their credit standards established. Transcripts will be sent to CAAHEP for evaluation by the program director. If the transcript does not come from a CAAHEP accredited institution, they will not be considered for transfer credit.

Transfer Credit for Students Entering the MBA program
The maximum number of credits that can be applied towards the MBA program is twelve.

Transfer Credit for Students Graduating from WTC to other Institutions of Higher Learning
WTC does not imply, promise, or guarantee that credits completed at WTC will be accepted by or transferable to any other college, university, or institution, and it should not be assumed that any credits earned at WTC can be transferred to another institution. In the United States higher education system, each institution has its own policies governing the acceptance of credit from other institution, and acceptance is determined by the receiving institution, considering such factors as course content, grades, accreditation, and licensing. Students seeking to transfer credits from WTC to another institution should contact the institution to which they seek admission to inquire about that institution's policies on credit transfer.

STUDENT FINANCIAL SERVICES

Student Financial Services staff are available to help students understand the financial aid programs available to them, guide them through the application process, and provide information on additional resources that may help cover the cost of attendance. The office is open during regular business hours on both campuses, and in the evening from Monday through Thursday. Students are encouraged to reach out with any questions or concerns related to the financial aid office

WTC participates in Federal Title IV Student Aid programs as authorized under the Higher Education Act of 1965, as amended. WTC is also approved for the training of veterans and other eligible individuals under the provisions of Section 3675, Title 38, U.S. Code.

Financial assistance is available to eligible students in accordance with the regulations of each aid program. While WTC complies with all applicable federal, state, and equal credit opportunity laws, financial aid is not guaranteed.
Detailed information about available aid programs, application procedures, eligibility requirements, and student rights and responsibilities can be found on the WTC website at www.westerntech.edu.

Alumni Credit
Graduates who qualify for the alumni discount will be required to maintain at least a 2.0 GPA per course to qualify for alumni discount benefit. Students who do not meet this benchmark during the billing cycles (as described below) will not qualify for alumni discount for that cycle.

Graduated Scale with a 50% Maximum

1st period 10% of tuition billed for period
2nd period 20% of tuition billed for period
3rd period 30% of tuition billed for period

4th period 40% of tuition billed for period
5th period 50% of tuition billed for period
6th period 50% of tuition billed for period

- Credit posted at the beginning of the next period
- Attendance and GPA requirements
- No probation for the applicable period
- Student Accounts Office will send an inquiry to the Registrar before posting credit

NOTE: For the alumni to receive the full benefit of the tuition discount, the alumni entering the new program must maintain minimum academic and attendance requirements.

FEDERAL STUDENT AID
The following are brief descriptions of the aid programs in which WTC participates. More detailed information is available on the college's website at www.westerntech.edu.

Federal Pell Grant
The Pell Grant does not require repayment. Eligible students who have not received a bachelor's degree may receive this grant based upon their financial need, which is determined by the information provided on their FAFSA application. The Student Aid Index (SAI) will determine a student's eligibility. More details can be found on the WTC Financial Services Consumer Guide or the Department of Education's website at studentaid.gov.

Federal Supplemental Education Opportunity Grant (SEOG)
Pell-eligible students may also be eligible for an additional grant under this program. SEOG awards are limited to those eligible students with the lowest SAI , generally 1500.

Federal Work-Study Program
This program enables students who demonstrate financial need to earn a portion of their education expenses. Students earn at least the current hourly minimum wage by working at the College, at non-profit organizations, or for other community employers.

Federal Stafford Loan Program
Eligible students at WTC can borrow a traditional "student loan" from the Federal Direct Student Loan Program. These loans are called Federal Stafford Loans, and the interest on these loans may be subsidized and/or unsubsidized. For maximum loan amounts, explanations of the differences between the "subsidized" and "unsubsidized" loan programs, and other important information, the candidate should visit the College's website at: www.westerntech.edu or Department of Education's website at studentaid.gov.

Federal PLUS Loan (Parents)
Parents of dependent students at WTC are generally able to borrow a Federal Parent PLUS Loan based on approved credit. Parents can borrow up to the full cost of education minus any other aid received.

Alternative/Personal Financing
If Federal Student Aid does not fully cover a student's educational costs, Western Technical College (WTC) offers additional options. WTC partners with Tuition Options to provide interest-free monthly payment plans for any remaining balance. Students may also apply for private student loans through College Ave, subject to credit approval.

If a student and/or parent would like to obtain personal financing through their own lender, they must consult with the Student Financial Services Office to discuss a personalized payment schedule.

SCHOLARSHIPS AND AWARDS
Western Technical College (WTC) offers a variety of scholarships to support both prospective and current students. These scholarships are available to individuals from diverse backgrounds, including high school seniors, adult learners, and career changers. Each scholarship has its own eligibility criteria, which may be based on academic performance, financial need, career goals, or other specific qualifications.

High School Senior Scholarships
The WTC High School Senior Scholarship awards five (5) total scholarships from each of the (17) eligible programs to all school districts throughout the Southwest region. The process to complete the High School Senior Scholarship application is as follows:

- Submit two letters of recommendation from an appropriate source (teachers, employers, counselors). Submit an essay explaining why you want a career in the field you are applying for (minimum 300 words). Describe your activities in school, work experience, previous training, and goals.
- Provide an official copy of your current high school transcripts (after the first semester of your Senior year).
- Schedule a Wonderlic Basic Skills Test (WBST) to be administered at WTC.

Awarded scholarship money will be applied towards current tuition using the following formula**:**

1st place will receive 25% off tuition
2nd place will receive 20% off tuition
3rd place will receive 15% off tuition
4th place will receive 10% off tuition
5th place will receive 5% off tuition

All seniors who will graduate from high school in the spring are eligible to apply for the High School Senior Scholarships. Students who wish to apply should see their high school career center or school counselor for a scholarship application or visit the Westerntech.edu website. The selection process is completed by a committee of local high school personnel. The application and review process are completed in mid-April.

High School Senior scholarships and awards are valid for one year after the award date. They are applied only towards tuition. They are non-transferable and redeemable only at WTC. Scholarship and award money are deducted from tuition only when a student successfully completes their program.

Skills USA Scholarships
WTC offers scholarships to the winners of the Skills USA competition (El Paso region). The High School Senior participants who place 1st through 3rd in each category will receive a scholarship using the following formula:

1st place will receive 20% off tuition
2nd place will receive 15% off tuition
3rd place will receive 10% off tuition

The High School Junior participants who place 1st through 3rd in each category will receive a scholarship using the following formula:

1st place will receive 10% off tuition
2nd place will receive 7.5% off tuition
3rd place will receive 5% off tuition

Skills USA Scholarships for Seniors and Juniors are valid for one year after the award date and are not a cash award. They are applied only towards tuition. They are non-transferable and redeemable only at WTC. Scholarships and award money are deducted from tuition only when a student successfully completes their program.

Military Appreciation Award
Active duty and reserve service members, honorably discharged veterans, National Guard members, and their dependents qualify for a 10% tuition reduction. Required supporting documents include the following:

1. **Veteran**: DD214 and a photo ID.
2. **Military Spouse**: DD214 or active-duty orders, photo ID, and marriage certificate.
3. **Military Dependent Child**:
    - **Biological Child**: Birth certificate and parent's DD214 or military ID.
    - **Stepchild**: Birth certificate, marriage license, and stepparent's DD214 or military ID.
    - **Adopted Child**: Adoption paperwork and DD214 or military ID.

The 10% reduction does not apply to books, tools, or any other charges

Career Colleges and Schools of Texas (CCST) Scholarships
WTC participates in the Career Colleges and Schools of Texas (CCST) scholarship program, which is available for high school seniors in both public and private high schools in Texas. The scholarship award is valued at $1,000.00, and each school receives 10 scholarship certificates per calendar year. The scholarship can be redeemed at participating colleges and universities throughout the state. The selection process is carried out at each high school, and only high school counselor(s) may award a scholarship. Both the career school and high school counselor are notified when a scholarship is issued. Scholarship recipients must graduate from high school in the same school year (September-June) as the issue date of the scholarship, and the deadline for awarding scholarships is August 31 of the year in which the student graduates from high school. Prospects who submit a CCST scholarship application that falls outside of the accepted dates will not be eligible for acceptance at WTC. Interested students should see their Texas high school career center or school counselor for CCST scholarship information.

Academic and Attendance Requirements for Scholarships and Awards
Each scholarship/award has academic requirements for a student to remain eligible for continued payments. Recipients are required to meet all academic and attendance requirements. Awards will be posted at the completion of the training program.

Limit on Awards
Prospective students who are enrolling will not be granted more than 50% off tuition in total scholarships and course exemption awards.

ACADEMIC PROGRESS FOR FINANCIAL AID ELIGIBILITY
All WTC students must maintain satisfactory progress toward completion of their academic programs. Students who fail to meet the academic progress standards of the college are subject to both academic penalties and the potential loss of eligibility for federal aid.

Definitions Effective 2019

- **Degree Programs** are defined as programs that lead to an associate, baccalaureate, or master's degree.
- **Certificate Programs** are non-term programs that do not result in a degree but offer a Certificate of Completion.
- **Graduate degrees** are programs that lead to Master's degrees.

Degree programs are measured in traditional Semester Credit Hours. Certificate programs are measured in Clock-to-Credit Conversion Credit Hours.

Payment Periods
The measurement of academic progress for financial aid occurs in increments that correspond to the "payment periods" for Federal Title IV financial aid. Academic progress is measured at the end of each payment period. For degree programs, the payment period is the Semester. For Certificate programs, the payment period is defined as one-half (as measured in both weeks and credit hours--instructional hours) of the student's scheduled academic year or the remaining scheduled period of instruction until program completion (whichever is less). If the remaining period of instruction is less than one-half of the standard academic year, (fewer than 12 credit hours) it is considered a single payment period.

Academic Progress Standards for Financial Aid	Minimum Cumulative Grade Point Average	Cumulative Hours Completed/ Attempted
End of 1st payment period	1.50	67 percent
End of 2nd payment period	1.75	67 percent
End of 3rd or subsequent payment period	2.00	67 percent

Maximum Timeframe Standard
To remain eligible for federal financial aid, students must complete their program within 150% of the published program length. This limit includes all attempted clock or credit hours at WTC, as well as accepted transfer or proficiency credits. Students who change programs may request a recalculation of their maximum timeframe based only on courses applicable to

their new program. Ineligibility due to exceeding the maximum timeframe may be appealed if mitigating circumstances exist. See the "Regaining Academic Eligibility" section for details.

Exempted Course(s) Credit
Twelve credit hours are considered a full academic load, and students exempt from courses won't be charged for them, and those enrolled in Title IV-eligible degree programs will receive financial aid based on their enrollment status. For students using VA Benefit Post 9/11, Basic Allowance for Housing (BAH) will be paid according to enrollment status. For more details, students can visit Student Financial Services or WTC's Veterans Resource Center.

GPA and Grading Policy
The grading policy, Grade Point Average (GPA) calculation, and attendance are calculated in accordance with the regular academic policies of WTC.

For Degree Programs "Attempted Hours"
"Attempted hours" are any credit hours for which the student was charged or received financial aid. "Completed Hours" refers to the number of "attempted" credit hours for which a student received a passing grade. For Certificate programs, "Attempted Hours" means the number of scheduled credit hours in the program as listed in the academic calendar to the measurement point. "Completed Hours" means the number of "attempted" credit hours a student attended.

Transfer Students
Accepted transfer credit is considered completed coursework for purposes of this policy. No grades are assigned to transfer courses and they will not impact the student's GPA. Academic years and payment periods for transfer students are defined individually based upon the remaining period of instruction.

Return after a Leave of Absence
A student who returns after a leave of absence, withdrawal, or other extended absence of 180 calendar days or fewer will not have the period of absence considered in the calculation of academic progress. In all other aspects, the students' progress will be evaluated in the same manner as if the absence had not occurred, except for any necessary changes to the start and end dates of planned payment periods. A student who returns after a withdrawal, dismissal, or other absence of more than 180 days will be measured in a manner consistent with a transfer student (see above). Students who do not return on their scheduled return date from their leave of absence will be dropped.

Financial Aid Warning Status
Students who fail to meet the standards defined above will be placed on Financial Aid Warning Status for their subsequent payment period. Students in Warning Status remain eligible for federal student aid. A student who has not returned to "good" academic standing by the end of the Financial Aid Warning Status payment period will lose eligibility for federal student aid from that point forward. Such dismissal/loss of eligibility may be subject to appeal (see below).

Data Corrections
If a student's academic record is corrected after the evaluation date, a student may submit a written request to the student financial services director for re-evaluation of the student's financial aid eligibility.

REGAINING ACADEMIC ELIGIBILITY FOR FINANCIAL AID
The Mitigating Circumstances Appeal
A determination of loss of eligibility for federal financial aid may be appealed based on mitigating circumstance(s). A mitigating circumstance is defined as an exceptional or unusual event(s) that contributed to or caused the academic difficulty and was beyond the student's direct control. Examples include the death of a relative, an injury or illness of the student, or other special circumstances. Appeal letters should be addressed to the Financial Services Director and must include a complete description of the circumstances that led to the academic difficulty, how those circumstances have changed, and a plan for future academic success. Copies of supporting documentation should be included. All appeals are reviewed by a committee of academic and administrative staff whose determination is final. A mitigating circumstance appeal may also be used to override the Maximum Timeframe Standard. A student for whom a mitigating circumstance appeal is approved will be placed on Financial Aid Probation Status for one payment period. If the student has not returned to good academic standing by the end of a probationary payment period, they will lose eligibility for future financial aid.

Regaining Eligibility Other Than through Appeal

Students who have lost federal financial aid eligibility may regain academic eligibility by being accepted into a different academic program at WTC or if the re-evaluated student's record (based upon the courses applicable to the new program) is found in compliance with all academic standards and/or make up the academic deficiencies at WTC without benefit of federal financial aid. In each of these circumstances, approval is left to the discretion of the campus president.

Return to Good Standing

Once a student has returned to good academic standing, any previous academic difficulty, warning, or probation will have no future bearing on the student's status. Those students will benefit from all provisions of this policy, including a warning payment period.

CANCELLATION AND REFUND POLICY

Cancellation Policy

To cancel enrollment, a student must submit written notice to administration. If using U. S. mail delivery, the student should send the notice of cancellation via registered mail to the appropriate campus address.

If the enrollment contract is canceled within 72 hours of signing (by midnight of the third day, excluding Saturdays, Sundays and legal holidays) or the enrollment of the student was procured as the result of any misrepresentation in advertising, promotional materials of the school or college, or representations by the owner or representatives of the school or college, a full refund will be issued. If the student cancels or fails to begin the program within 14 school days of the start date, a full refund will be issued, minus the $100 registration fee. Books and supplies returned in good condition will be fully refunded. Items not returned will be billed to the student, and any unpaid balance must be paid within three months to avoid collection action.

Refund Policy

Refunds will be calculated, as appropriate, if the student withdraws or is withdrawn from Western Tech more than 14 school days following the program start date, and prior to the completion of the program. If the Student withdraws from Western Tech, he or she should submit a written withdraw request to the Administrative Specialist. Refunds will be calculated as set forth below.

1. Refund computations will be based on scheduled clock hours of class attendance through the last date of attendance. Leaves of absence, suspensions, and school holidays will not be counted as part of the scheduled class attendance.
2. The effective date of termination for refund purposes will be the earliest of the following:
    a. The last day of attendance if the student is terminated by Western Tech;
    b. The date of receipt of written notice from the student; or
    c. Ten school days following the last date of attendance.
3. If the Student account has a credit balance, it is the policy of Western Tech to refund the amount according to the completed Student Account Closeout form on file with the Financial Aid office. Refunds are only issued in the event of a credit balance.
4. If the Student enters a residence or synchronous distance education program and withdraws or is otherwise terminated, Western Tech will not refund the $100 Registration Fee. The refund of the remaining tuition and fees will be the pro rata portion of tuition, fees, and other charges that the number of hours remaining in the portion of the course or program for which the Student has been charged after the effective date of termination bears to the total number of hours in the portion of the course or program for which the Student has been charged, except that the Student may not collect a refund if the Student has completed 75 percent or more of the total number of hours in the portion of the Program for which the Student has been charged on the effective date of termination.
5. Refunds for books and supplies will be handled separately from refund of tuition and other academic fees. The student will not be required to purchase books and supplies until these materials are required for the Program. Once these materials are purchased, no refund will be made.
6. If the Student withdraws for a reason unrelated to the student's academic status after the 75 percent completion mark and requests a grade at the time of withdrawal, he or she shall be given a grade of "incomplete" and permitted to re-enroll in the course or program during the 12-month period following the date the student withdrew without payment of additional tuition for that portion of the course or program.
7. A full refund of all tuition and fees is due and refundable in each of the following cases:

a. A prospective Student is not accepted by Western Tech;
b. If the course of instruction is discontinued by the school and this prevents the student from completing the course; or
c. If the Student's enrollment was procured because of any misrepresentation in advertising, promotional materials of the school, or representations by the owner or representatives of Western Tech.
d. A full or partial refund may also be due in other circumstances of program deficiencies or violations of requirements for career schools and colleges.

8. If, during the program, Western Tech determines that the student is unlikely to be successful in his or her Program, the school reserves the right to terminate the student's training. In any such instance, tuition will be refunded in accordance with the refund policy.

Refund Policy for Students Called to Active Military Service

If a student withdraws because they are called to active duty in a military service of the United States or the Texas National Guard, the student may elect one of the following refund options:

a. If tuition and fees are collected in advance of the withdrawal, a pro rata refund of any tuition, fees, or other charges paid by the student for the program and a cancellation of any unpaid tuition, fees, or other charges owed by the student for the portion of the program the student does not complete following withdrawal.
b. A grade of Incomplete with the designation "withdrawn military" for the courses in the program, other than courses for which the student has previously received a grade on the transcript, and the right to re-enroll in the program, or a substantially equivalent program if that program is no longer available. This must occur no later than the first anniversary of the date the student is discharged from active military duty without payment of additional tuition, fees, or other charges for the program other than any previously unpaid balance of the original tuition, fees, and charges for books for the program.
c. The assignment of an appropriate final grade or credit for the courses in the program but only if the instructor or instructors of the program determine that the student has performed either of these:
   i. satisfactorily completed at least 90 percent of the required coursework for the program.
   ii. demonstrated sufficient mastery of the program material to receive credit for completing the program.
d. The payment of refunds will be completed so that the refund instrument has been negotiated or credited into the proper account(s) within 60 days after the effective date of termination.
e. In all cases, refunds issued under this section will meet or exceed the requirements of TEC, §§132.061 and 0611

RETURN OF TITLE IV FUNDS

Return to Title IV/ Refund Repayments Policy

This policy applies to students who receive Federal Title IV financial aid and withdraw from WTC before completing their program. Students who cease enrollment may owe a balance to the College if federal funds must be returned. The College will perform a Return of Title IV Funds (R2T4) calculation to determine how much aid was earned and whether funds must be returned or disbursed. This calculation is based on federal regulations and is separate from any tuition or fees owed to the College.

Withdrawal before 60%

The college must compare the amount of Title IV aid the student earned to the amount disbursed and determine whether funds must be returned, or the student is eligible for a post-withdrawal disbursement. The college determines the amount of earned aid up through the 60% point in each payment period and uses the Department of Education's proration formula to determine the amount of financial aid funds the student has earned at the time of withdrawal.

Withdrawal after 60%

After the 60% point in the payment period or period of enrollment, a student has earned 100% of the Title IV funds they were scheduled to receive during the period. For a student who withdraws after the 60% point-in-time, there are no unearned funds; however, the college will calculate the student's eligibility for a post-withdrawal disbursement.

Calculating R2T4

Federal Title IV aid is earned on a prorated basis until 60% of the payment period is completed. For clock-hour programs, proration is based on scheduled instructional hours; for credit-hour programs, it's based on calendar days. Earned and unearned aid is calculated using the student's last date of attendance (LDA) and the academic calendar. Returned funds are allocated in this order: Unsubsidized Direct Loans, Subsidized Direct Loans, Direct PLUS Loans, Federal Pell Grants, and Federal Supplemental Educational Opportunity Grants (FSEOG). The calculation steps are outlined as follows:

1. Determine the percentage of aid earned by dividing the number of days or clock hours completed by the total in the payment period. This percentage is then applied to the total Title IV aid to calculate the amount earned.
2. If the earned aid exceeds the amount disbursed, the student may be eligible for a Post-Withdrawal Disbursement. If the earned aid is less, the unearned portion will be returned to the federal aid programs.

In some cases, a Return of Title IV Funds (R2T4) calculation may result in a federal financial aid overpayment, meaning the student received more aid than they earned. If this occurs, the student may be required to repay a portion of their federal aid (such as Pell Grant or SEOG). The Financial Aid Office will notify the student of the amount owed and provide instructions for repayment. Until the overpayment is resolved, the student will be ineligible for additional federal aid at any institution. Students are encouraged to speak with the Financial Aid Office before making changes to their enrollment, as withdrawing or dropping classes may affect aid eligibility and result in a balance owed.

Return to Title IV Funds Timeframe

WTC adheres to the maximum timeframes prescribed by regulation to return unearned funds. The date of the determination of the student's withdrawal remains 14 days from the student's last day of attendance; with the exception of students determined to be on an approved leave of absence. The institution will return any unearned funds within 45 days after the date the institution determined that the student withdrew.

Post-Withdrawal Disbursement

If a student earns more Title IV aid than was disbursed, they may be eligible for a post-withdrawal disbursement. The College will notify the student in writing if they qualify for loan funds, which must be accepted or declined in writing by the student or parent borrower.

Federal Pell Grant post-withdrawals do not require acceptance. The College will request student authorization to apply any post-withdrawal funds to charges beyond tuition and fees.

Non-punitive grades are a "W" grade for withdrawing from a course or an "I" grade for an incomplete course that is not made up during the time required by the school. These grades do not affect a student's grade point average and do not count as earned credit.

ACTIVE MILITARY AND VETERAN AFFAIRS

WTC locations with approved programs work with the Department of Veterans Affairs to process education benefits for eligible students. Eligibility is determined by the VA, and a Certificate of Eligibility (COE) is required to certify benefits. For more information, visit WTC Veterans Guide

WTC will help students complete required forms and submit documentation for veterans' educational benefits under chapters 1606, 30, 31, 33, 35, MyCAA, and Tuition Assistance. WTC provides ongoing services to veterans and their dependents and is responsible for creating and maintaining records used to certify a student's status for the VA.

For more information, students should refer to WTC's Veterans Guide
https://www.westerntech.edu/financial-assistance-for-military-veterans/

For immediate information, candidates and students may call for assistance at either campus.

- Main Campus (915)532-3737 or 1(800)225-5984

- Branch Campus (915)566-9621 or 1(800)225-5984

Tuition and Fee Deferment Policy for VA Students
In compliance with the Veterans Benefits and Transition Act of 2018, Western Technical College (WTC) allows eligible VA students to defer payment of tuition and fees while their VA Educational Benefits are being processed.

Eligibility
This deferment policy applies to students who meet the following criteria:

- Eligible to receive educational assistance under Chapter 31 (Vocational Rehabilitation and Employment) or Chapter 33 (Post-9/11 GI Bill®) benefits
- Able to provide a **Certificate of Eligibility (COE)**, **Statement of Benefits**, or **VA Form 28-1905** from the Department of Veterans Affairs for the current academic term

Policy

- Upon receipt of the required documentation, WTC will defer the student's tuition and fee payment without penalty while waiting for VA funding. The deferment covers all tuition and mandatory fees that are expected to be paid by the VA.

Student Responsibility

- Students must ensure timely submission of their VA documentation to avoid delays in deferment.
- Any outstanding balance after VA benefits are applied must be paid by the student to avoid late fees.

WTC is committed to supporting VA students by ensuring they can attend classes without financial barriers while their VA benefits are processed. For any questions or assistance, students can contact the Veterans Resource Office.

Veterans Information Sources

Department of Veterans Affairs (VA) www.va.gov or www.gibill.va.gov
Muskogee Regional Processing Office (Education) PO Box 8888
Muskogee, OK 74402-8888

Educational Benefits Inquiries: 1-888-442-4551 (1-888-GIBILL-1)
Website: https://www.va.gov/education/
E-mail: muskrpo@vba.va.gov

AIR FORCE, SPACE FORCE Community College of the Air Force	ARMY, COAST GUARD, MARINE CORPS, AND NAVY: Joint Services Transcript (JST)
CCAF/DFRS 100 South Turner Blvd., Gunter Annex, AL 36114-3011 https://www.airuniversity.af.edu/CCAF/	NETPDTC ATTN: JST Operations Center N615, 6490 Saufley Field Road, Pensacola, FL 32509 Email: jst@doded.mil https://jst.doded.mil/

Veteran Leave of Absence Policy (LOA)

All LOAs requested by veterans must be approved by the campus president, program director, and the VA certifying Official. All Chapter 31 students are required to receive authorization for a Leave of Absence from their designated Vocation Rehabilitation Counselor before they are granted a LOA. Any student requesting a LOA will be notified that their veteran benefits may be suspended until they have returned, at which time the veteran will be reinstated and recertified. Veterans are encouraged not to take a LOA in the middle of a course but rather at the end of a course. If a veteran requests a LOA in the middle of the course, the veteran will be responsible for paying back the money received. Furthermore, upon recertification, the Veterans Affairs office can take up to two (2) months to process recertifications, which may result in further delay of payments.

Military Obligations, Attendance, and Make-up Work

Many students choose to serve while pursuing their education. Standing by its reputation as a military friendly school, WTC attempts to accommodate a student's desire for continuing service. For members of the National Guard and Reserves, there may be times when students might miss a class or two due to a weekday drill or similar military

training. If orders are not issued, the student must contact the registrar and bring a signed letter (usually from the unit CO) that specifically outlines the date(s) on which the student was in a military status. The registrar, upon verifying the letter, will send a clearance notification via email directly to the student. Notification will be sent to the instructor, either in person or through email. Students are responsible for keeping their course instructor(s), program director, registrar, and VA certifying official informed of all military absences so that all can agree upon and document make-up work or a leave of absence.

Internship

VA students must complete their internship by the end of the module or their expected graduation date, whichever comes first.

Time Codes

The following time code is used on all courses in every program to illustrate the amount of time students will spend in class or lab per course and the subsequent number of credit hours awarded.

44/48/4.0 Theory hours per course / Lab hours per course / Semester Credit Hours

GENERAL INFORMATION

Curricular Revisions

The College reserves the right to vary the sequence of courses and revise and/or update curriculum content, textbooks, and tool sets as needed, with or without notification.

Semester Credit Hours

A credit hour is defined as an amount of work represented in intended learning outcomes and verified by evidence of student achievement for academic activities as established by the institution comprised of the following units: didactic learning environment; supervised laboratory setting of instruction; externship; and out-of-class work/preparation.

Semester Credit Hours are defined by the state regulatory bodies as the successful completion of fifteen (15) clock hours of theory instruction, thirty (30) clock hours of laboratory instruction, or forty-five (45) clock hours of internship. Each clock hour is at least fifty (50) minutes in length. At least one hour of study time is recommended for each hour of lecture.

ACCSC defines one semester credit hour as the completion of 45 units comprised of the following academic activities:

- One clock hour in a didactic learning environment = 2 units
- One clock hour in a supervised laboratory setting of instruction = 1.5 units
- One hour of externship = 1 unit
- One hour of out-of-class work and/or preparation for the didactic learning environment or supervised laboratory setting of instruction that are designed to measure the student's achieved competency relative to the required subject matter objectives = 0.5 unit

SCUs in all programs fulfils the requirements from the state regulators and the accreditor and WTC ensures that they align.

Student Insurance

WTC provides insurance coverage for a student injured while attending class or school functions on WTC premises and during internship and group activities sponsored by the college. The policy does not cover students when they leave the campus for non-prescribed WTC activities nor after they graduate. WTC also provides medical malpractice insurance for students in the following programs: Medical Clinical Assistant, Physical Therapist Assistant, and Nursing.

Class Size

The number of students per class or per instructor varies depending on the course of study. Generally, lecture class limits the maximum number of students to 30 per instructor, 20 for the MBA program. The maximum ratio for

lab/shop instruction is set at 20 students per instructor; 10:1 student to instructor ratio for clinicals. Class size for Physical Therapist Assistant is a maximum of 24 students per class and a maximum of 12:1 student-instructor ratio for laboratory.

Official Communication Policy
Any official correspondence from WTC to a student will be sent in **w**riting to the student's permanent postal mailing address or by personal delivery on the school premises or Via Electronic Communication (Student Portal, Student Learning Management System, Emergency Alert System, and/or Student Information System), email, or text at the WTC email address provided to all students.

Students are responsible for reading and responding appropriately upon receipt of any official correspondence sent from WTC staff or faculty.

Educational or Operational Changes
WTC reserves the right to make changes, at its sole discretion, to any facet of its operations, including graduation requirements, costs, curriculum, course structure and content, faculty, methods of delivery, class schedules, and the calendar of operations, as needed. WTC reserves the right to cancel or postpone any new start for any program due to insufficient enrollment. Reasonable notice of any such changes will be provided to the student. Any policy change to the catalog is updated, and the latest version is made available through WTC's website or through the school's Admissions department.

Internship/Clinical Requirements
A student should complete all program requirements before going on Internship. On rare occasions, a student may need to go out on internship before they are able to take a required course that is unavailable. A student will not be allowed to go to internship until they have been cleared through career services, student loan advisors, financial aid, student accounts, program director and the registrar. The clearance process will be completed a minimum of 45 days before the scheduled internship. Each student will be placed at an approved business location related to their field of study. Generally, internships are unpaid.

While every effort is made to schedule Internship experiences to coincide with evening students' school schedules, most Internships occur during regular daytime hours from 8:00 a. m.–5:00 p.m. As a result, students may be required to transfer to a different schedule to complete their internship

During the internship, students may be required to work up to eight (8) hours per day and will need to adjust their schedules accordingly. Any exceptions must be approved by the Program Director and the employer.

Clinical and internship sites may require drug testing and/or background checks before a student's scheduled internship/clinical experience. The cost(s) of testing is the responsibility of the student.

For the Physical Therapist Assistant students, if they test positive for illegal drugs, the student will be automatically suspended from the program of study for a period of no fewer than 30 days. At the completion of 30 days, the student will be required to re-take a drug test at their cost. If the drug screen returns negative, the Academic Coordinator of Clinical Education (ACCE) will be allowed to work with the student to place them at a site. If the screen returns positive, the student will be dropped from the program. The student will be given a resource directory, and WTC will advise the student to seek counseling. If the student chooses to undergo drug counseling and successfully completes it, the student may re-apply for their program 30 days after termination.

Upon completion of all technical courses for the Automotive Technology and Diesel Mechanics programs, as you head to fulfill your internship requirement, you will be issued your fully equipped Matco toolbox.

Graduation Requirements
To graduate from WTC, all students must obtain a minimum of 2.0 cumulative GPA; 3.0 CGPA for the BSN and MBA programs and 2.8 CGPA for the PTA program, an 85% overall attendance and complete all required courses, including capstone, clinicals or internship.

Advanced Welding Graduation Requirements
Students will be required to demonstrate an entry-level degree of proficiency in each competency as outlined in each course description. A student who fails to achieve the required levels of competency will not be able to graduate.

Computer Support Specialist Graduation Requirements
Students graduating from this program are required to obtain the following certifications: CompTIA certifications, CompTIA A+, CompTIA Network+, and CompTIA Security +.

Commercial Driver Training Graduation Requirements
To receive a Certificate of Completion for this program, a student must maintain a cumulative grade average of 70 and obtain a Commercial Driver License by the final day of the program, depending on driving test scheduling availability. WTC works to ensure students are prepared to challenge the CDL exams through the Texas Department of Safety. The Department allows examinees as many as three chances to test in each of the sections: "The Pre-Trip, The Backing Skills, and The Driving Skills." When students fail to pass an exam, WTC provides additional time for practice and involves instructors, trucks, trailers, and fuel costs at no additional charge. The use of time and equipment has strained WTC's resources so that after any CDT student fails three road test exams, they will be required to pay WTC an additional $250.00 to cover the costs involved with practicing maneuvers, the use of equipment, and additional road tests.

FCA MOPAR Graduation Requirements
Students must successfully complete all required MOPAR modules before they are allowed to graduate and receive their certificate.

Medical Clinical Assistant Graduation Requirements
Students graduating from the MCA program are required to earn a minimum of one (1) industry certification. If a student fails a certification exam WTC will hold the Certificate of Completion/Final Transcript, and the student will not be allowed to walk in the graduation ceremony.

Automotive Technology and Diesel Mechanics Graduation Requirements
Students graduating from these programs are required to achieve at a minimum one (1) ASE certification.

Refrigeration and HVAC Technology Graduation Requirements
Students in this program must obtain EPA 608 certification, with a minimum of Type II certification, prior to their scheduled graduation date.

Aerospace and Defense Technology, Electronics Engineering Technology and Bachelor in Business Administration Graduation Requirements
Students graduating from this program are required to achieve at a minimum, (two) professional certifications.

Computer Science Graduation Requirements
Students graduating from this program are required to earn a minimum of one of the professional certifications.

WTC confers certificates/degrees, including Certificate of Completion, Associate of Occupational Studies Degree, Associate of Applied Science Degree, bachelor's degrees, and a master's degree.

The following categories are recognized at the graduation ceremonies:

- Summa Cum Laude, one selected from each campus (White sash): 4.0 GPA and 98%-100% attendance
- Magna Cum Laude (Gold Cord): 3.8- 4.0 GPA and 97% or higher attendance
- GPA Recognition (Blue Cord): 3.8-4.0 GPA
- Attendance Recognition (Red Cord): 97% or higher attendance

Transcript Requests
Unofficial transcripts are available electronically through the students' Campus Vue portal. Requests for official transcripts may be made by contacting the front desk staff at each campus. Graduates will be allowed to pick up their transcripts approximately four to six weeks after they graduate at no charge. Any additional official transcript requests will take approximately five to seven school days for a charge of $10.00 each.

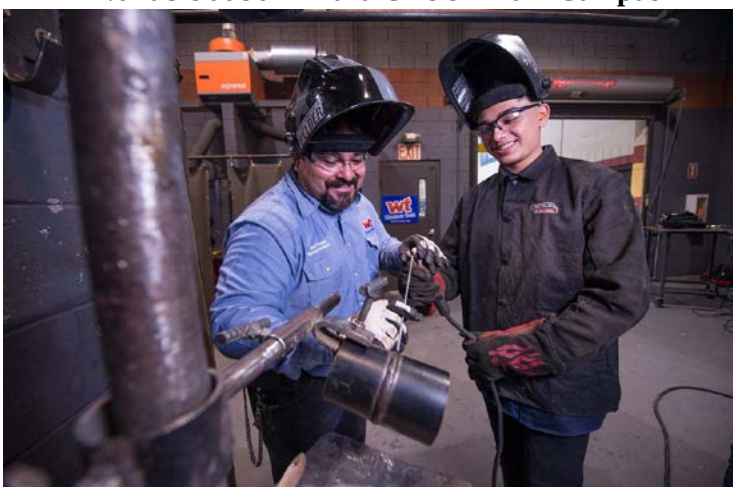
Refresher Training
To stay current with changing technological developments in their industries, graduates may return to WTC and retake any courses of the program from which they graduated according to the following conditions:

- Refresher training will be allowed only on a "space available" basis and requires the approval of both the program director and campus president.
- Graduates may repeat up to three courses in the program from which they graduated at no tuition charge. Any additional courses will be charged at 25% of the tuition rate in place at the time of the request.

Articulation Agreements
For graduates wishing to continue their education elsewhere, WTC has structured articulation agreements with Grand Canyon University. For further information, graduates should contact these institutions regarding course exemptions and credits or speak with their WTC campus president.

PROGRAM OFFERINGS
C E R T I F I C A T E P R O G R A M S

ADVANCED WELDING TECHNOLOGY
Available at 9624 Plaza Circle - Main Campus



Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities in Advanced Welding Technology
Welders use hand-held or remotely controlled equipment to join, repair, or cut metal parts and products. may work outdoors in all types of weather, or they may work indoors, sometimes in a confined area. Most work full time, and some work more than 40 hours per week. Welders typically need a high school diploma or equivalent, combined with technical and on-the-job training, to enter the occupation. The median annual wage for welders was $48,940 in May 2023. Employment of welders is projected to grow 2 percent from 2023 to 2033, slower than the average for all occupations. Despite limited employment growth, about 45,800 openings for welders are projected each year, on average, over the decade. Most of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	409
Projected Employment 2035	431
Average Hourly Wage 2024	$18.38
Average Openings per year	43
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

ADVANCED WELDING TECHNOLOGY
COURSES 1-11
1030 CLOCK HOURS
39.0 Semester Credit Hours

Educational Objectives
The objective of the Advanced Welding Technology program is to train the students as a qualified welder. The qualified welder is capable of interpreting welding blueprints, cutting and welding with oxyacetylene, and doing plate welding with Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), Gas Metal Arc Welding (GMAW), Innershield (IS), and Flux Core Arc Welding (FCAW). In addition, students will learn skills for pipe lay-out and fit-up, flange applications, rolling offset, and pipe blueprint reading. Those who complete the program successfully will be prepared to work in entry-level positions as structural or pipe welders in various welding environments such as construction companies, shipyards, factories, fabrication companies, welding shops,

and other enterprises.

Certifications

*Structural Certifications: 2G/3G/4G SMAW - 1/4" V-groove
*Pipe Certifications: 6G SMAW - 3" sch. 40; 6G Combo: SMAW / GTAW - 3" sch. 40

Technical Standards and Essential Functions

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodations to be successful in completing this program satisfactorily.

1. Ability to adhere to concise safety policies/procedures.
2. Ability to stand for extended periods of time.
3. Ability to flex, bend, or twist with body, arms, and legs.
4. Ability to see detail at close range.
5. Ability to maintain prescribed attendance/performance levels that meet academic requirements.
6. Comfortable working at elevated heights such as platforms.
7. Strong problem solving, communication and analytical skills.

Note: The sequential order of classes may differ from than what is listed in the program outline below. Courses with prerequisites are indicated in the course outline with an asterisk (*).

ADVANCED WELDING TECHNOLOGY

#	Course Number	Course Title	Hrs.	Theory/ Lab/Int.	% On-Ground/ Online	Semester Credit Hours
1	FOU 101	Foundations	48	26/22	80/20	2.0
2	OR 101	Orientation	48	26/22	80/20	2.0
*3	PR 102	Blueprint Reading Fundamentals	111	27/84	80/20	4.5
*4	PR 103	Blueprint Structural Shapes & Symbols	111	27/84	80/20	4.5
*5	PM 104	Pipe Welding Symbols & Metallurgy	111	27/84	80/20	4.5
6	CW 105	Structural Code Welding	111	27/84	80/20	4.5
7	PW 301	Pipe Welding & OSHA Safety	111	27/84	80/20	4.5
8	PW 302	Combination Pipe Welding	111	27/84	80/20	4.5
9	PW 303	Code Pipe Welding	96	23/73	80/20	3.5
10	CD 100	Career Development	32	20/12	80/20	1.5
*11	IN 108	Internship	140	0/0/140	00/00	3.0
		Total Hours and Credits - Certificate of Completion in Advanced Welding	**1030**	**257/633/140**		**39.0**

ADVANCED WELDING TECHNOLOGY COURSE DESCRIPTIONS

FOU 101 **FOUNDATIONS** **26/22/2.0**

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

OR 101 **ORIENTATION** **26/22/2.0**

Upon completion of this course, the student will be able to tell the history of welding; describe the oxy/acetylene process for welding and cutting; apply basic math concepts; follow safety precautions; demonstrate measurement accuracy that will meet industry codes; **s**ave setup time up to 30%, so that they can tack and weld faster; save money by avoiding over-

cutting filler metal or wasting misaligned parts; catch defects like gaps or irregular welds early; and deliver consistent results on dozens of welds.

PR 102 BLUEPRINT READING FUNDAMENTALS 27/84/4.5
Upon completion of this course, the student will be able to describe the use of various engineering drawings; utilize technical terminology; begin the design phase of a blueprint to describe a real-world project and use welding and measurement standards to critique another's designs; interpret and fabricate weldments from a blueprint using the SMAW process; and begin welding in the 2F/3F/4F positions.

PR 103 BLUEPRINT STRUCTURAL SHAPES & SYMBOLS 27/84/4.5
Upon the completion of this course, the student will be able to identify shapes and welding symbols used in structural blueprints; operate a track torch and weld in the 2G position using the SMAW process; and explain the role of "destructive" testing.

PM 104 PIPE WELDING SYMBOLS AND WELDING METALLURGY 27/84/4.5
Upon completion of this course the student will be able to describe the requirements of AWS D1.1 Code Welding; utilize the principles of structural weld testing on practice structural welding tests; and use the SMAW welding process to pass the prescribed AWS Structural Certification tests; and use pipe welding symbols for fabrication and execute pipe welds using their blueprints, shop drawings, and measurement skills from previous courses.

CW 105 STRUCTURAL CODE WELDING 27/84/4.5
In this course students will be introduced to the requirements of AWS D1.1 Code Welding, understand the principles of structural weld testing, perform practice structural welding tests, and take the prescribed AWS Structural certification tests using the SMAW welding process. Students must pass all 3-position tests to advance to PW 301.

PW 301 PIPE WELDING AND OSHA SAFETY 27/84/4.5
Upon the completion of this course, students will be able to perform pipe welding using the SMAW process and explain the certification requirements of the API 1104 pipe welding codebook; follow OSHA safety procedures for excavation/trench, fall protection, and confined space safety; and perform in 2G/5G/6G pipe welding positions.

PW 302 COMBINATION PIPE WELDING 27/84/4.5
In this course students will learn the procedures for SMAW/GTAW (Combination) pipe welding and advanced pipe fit-up techniques. Practice certification tests using the 'Combo' process will be administered and students will fabricate from piping blueprints using the required formulas and layout procedures.

PW 303 CODE PIPE WELDING 23/73/3.5
In this course students will take API 1104 pipe welding certification tests, receive a comprehensive review of all previous courses, and complete a final exam.

CD 100 CAREER DEVELOPMENT 20/12/1.5
Upon completion of this course, students will be able to produce a resume, cover letter, reference list, and relevant documentation in alignment with their career field and personal background. Students will learn and apply techniques concerning the job search process, navigation of electronic and traditional employment applications, various forms of interviews, and follow-up correspondence. Students will utilize research methods in preparation for successful interviews, career mobility, and advancement.

IN 108 INTERNSHIP 0/0/140/3.0
In this course students will experience the daily routines of a Welding/Fabrication shop or 'on site' work environment. Students will have the opportunity to apply the skills and knowledge acquired in the Advanced Welding Technology program and gain real world work experience in the industry.

COMMERCIAL DRIVER TRAINING

Technical courses taught at 9624 Plaza Circle – Main Campus
Driving Range available at 9700 Gateway Blvd. North – Satellite Campus

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities for Commercial Driver Training

Heavy and tractor-trailer truck drivers transport goods from one location to another. Working as a long-haul truck driver is a lifestyle choice because these drivers can be away from home for days or weeks at a time. Career opportunities include over-the-road truck driver, whole sale trade trucking, general freight trucking, specialized freight trucking, delivery truck driver and heavy equipment hauler. They must have a commercial driver's license (CDL).The median annual wage was $57,440 in May 2024. Employment is projected to grow 5 percent from 2023 to 2033, about as fast as the average for all occupations. About 240,300 openings for heavy and tractor-trailer truck drivers are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	4,850
Projected Employment 2035	5,246
Average Hourly Wage 2024	$21.60
Average Openings per year	568
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

COMMERCIAL DRIVER TRAINING
COURSES 1-3
200 CLOCK HOURS

Educational Objectives

Students will learn and understand federal, and state regulations related to commercial driving, including hours of service, weight limits, and hazardous materials handling. They will gain knowledge of vehicle components, systems, and how to perform pre-trip and post-trip inspections. Students will learn about defensive driving techniques, accident prevention, and emergency procedures. They will learn how to plan trips, load and secure cargo properly, and manage logbooks. This includes understanding vehicle controls, basic maneuvers, and safe driving practices. They will learn to maneuver vehicles in different situations, including backing, turning, and navigating various road conditions. Students will practice safe driving habits, including scanning the road, maintaining a safe following distance, and reacting appropriately to different situations. They will be trained to pass the CDL exam, including both the written and practical driving tests.

Official Testing Site
Western Tech has certified third party testers for the commercial driver's license on staff who are authorized to test students and applicants with an out-of-state driver's license. This takes the place of process offered by the Texas Department of Public Safety.

Technical Standards and Essential Functions
Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program satisfactorily.

1. The ability to read and communicate effectively in English.
2. The ability to operate a manual drive transmission and standard automatic.
3. The ability to detect or tell the differences between sounds that vary in pitch and loudness.
4. The ability to sit for long periods of time.
5. The ability to drive at night.
6. The ability to drive long distances and remain alert.
7. The ability to climb steps.
8. The ability to match or detect differences between colors, including shades of color and brightness.
9. The ability to bend, stretch, twist, or reach with arms extended, and/or legs.
10. The ability to adjust the controls of a vehicle quickly and repeatedly to exact positions.
11. The ability to lift up to 50 pounds.
12. Strong problem solving, communication and analytical skills

COMMERCIAL DRIVER TRAINING

#	Course	Title	Theory/Lab	Clock Hours
1	PCDT 101	Practical Application to Truck Driving	75/5	80
2	PCDT 102	Basic Vehicle Operations/Range Training	13/27	40
3	PCDT 103	Advanced Vehicle Operations/Road Training	5/75	80
Total Hours – Certificate of Completion in Commercial Driver Training			**93/107**	**200**

CDT COURSE DESCRIPTIONS

PCDT 101 PRACTICAL APPLICATIONS TO TRUCK DRIVING 75/5/80
Upon completion of this course students will be able to explain the rules, regulations, and procedures that govern and regulate the trucking industry. After the first week of training, students will be able to prepare for the required Department Public Safety, (DPS) knowledge tests and receive their driving permits once all endorsement tests have been successfully completed. After the second week of training, students will be able to recognize hazard perception, speed and space management, adverse driving conditions, hazard recognition, visual search, read a Road Atlas, trip planning, and driver's qualifications and disqualifications. Students will also be able to demonstrate the correct use and inspection of each vehicle control, instrument, and component; describe and/or demonstrate the methods and procedures for correct cargo handling and documentation, accident reporting, logbook entries, and trip planning; describe the culture of the trucking industry to prepare themselves and their families for life on the road; recognition and help to prevent human trafficking; Student's will be able to inspect a vehicle, complete industry forms, prepare for a trip, recognize and take actions to prevent human trafficking, and detect mechanical failures, and will complete the National Safety Council Professional Truck Driver Defensive Driving Course. Students will also complete the minimum required training by Entry-Level Driving Training (ELDT) curriculum.

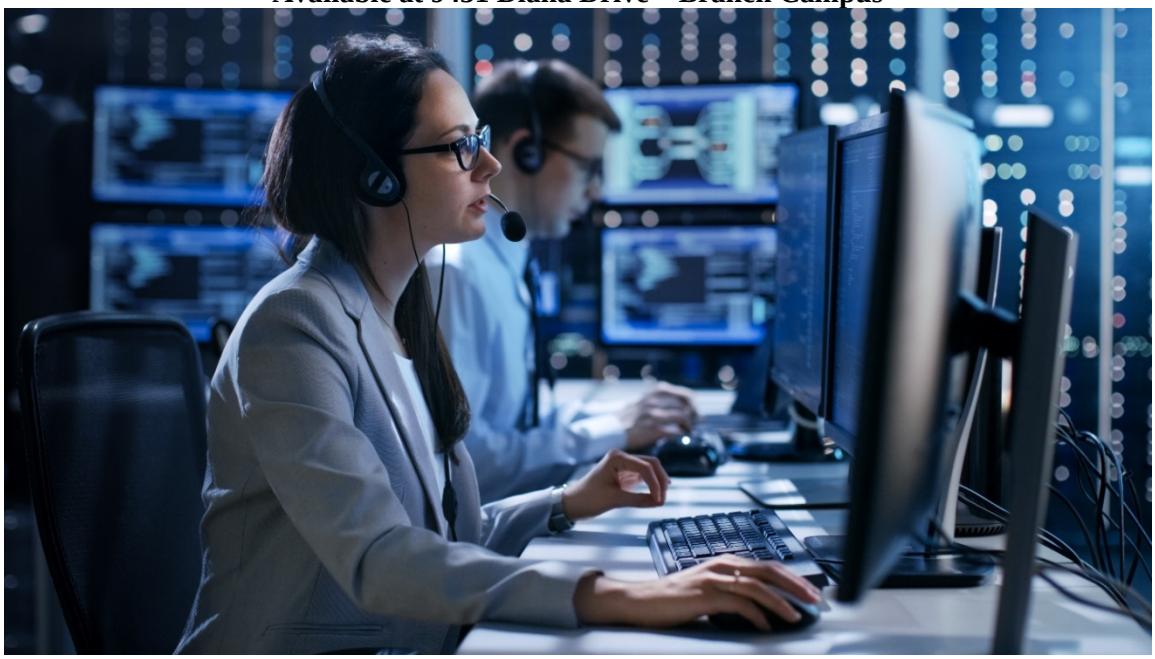
PCDT 102 BASIC VEHICLE OPERATIONS/RANGE TRAINING 1*3/27/40*
Prerequisite: PCDT 101
Upon completion of this course students will be able to, in a secure environment, become proficient in the basic maneuvers and skills needed to control a tractor-trailer safely and effectively; participate in range instruction that

will include hands-on training in vehicle inspection procedures that will prepare students for the CDL Pre-trip Inspection Skills Test; demonstrate maneuvering skills and vehicle controls necessary to pass the CDL Basic Control Skills Test and become successful trainee drivers; Students will be able to demonstrate the correct procedures for coupling and uncoupling tractor and trailer, backing, and hooking up a tractor-trailer unit to safely dock and pickup and deliver freight as a working driver with the Entry-Level Driving Training (ELDT) minimum training curriculum.

PCDT 103 ADVANCED VEHICLE OPERATIONS/ROAD TRAINING 5/75/80
Prerequisite: PCDT 102
Upon completion of this course, students will be able to operate a tractor-trailer on city streets and highway environments in regular traffic; through road instruction develop the skills prepare for the CDL Road Test conducted by a state examiner and to safely operate a tractor-trailer on public roadway. Students will be able to drive on public roads, develop the skills necessary by the Entry-Level Driving Training (ELDT), required by the Federal Motor Carrier Safety Administration (FMCSA), to safely operate the tractor trailer, and demonstrate the skills needed to challenge and pass the CDL road test. Students must successfully complete this course to become a fully certified driver.

COMPUTER SUPPORT SPECIALIST

Available at 9451 Diana Drive – Branch Campus



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Career Opportunities for Computer Support Specialist

Computer support specialists maintain computer networks and provide technical help to computer users. Most computer support specialists work full time. Because computer support services may need to be available 24 hours a day, some specialists work nights or weekends. Entry requirements vary for computer support specialists. Network support specialists typically need an associate's degree, and user support specialists typically need to complete some college courses. However, candidates may qualify with a high school diploma plus relevant information technology (IT) certifications. The median annual wage for computer user support specialists was $60,340 in May 2024. Overall employment of computer support specialists is projected to grow 6 percent from 2023 to 2033, faster than the average for all occupations. About 62,700 openings for computer support specialists are projected each year, on average, over the decade.(Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	1,090
Projected Employment 2035	1,198
Average Hourly Wage 2024	$27.84
Average Openings per year	87
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

COMPUTER SUPPORT SPECIALIST
COURSES 1-4
480 CLOCK HOURS
20.0 SEMESTER CREDIT HOURS

Educational Objectives

The graduate of the Computer Support Specialist Certification program gains knowledge and experience in the following areas: Networking, Cabling, Network and End Point Security, sales, and service. The skill set presented in this program will prepare the graduate for entry-level careers in PC service and repair, Network Support, Desktop support, and Network Security administration. They will be prepared for the following professional certification examinations (CompTIA A+, CompTIA Net+, and CompTIA Sec+) and will take the exams during the training.

Certifications

The experience gained from this program will prepare the student for the following professional certification examinations: CompTIA A+, CompTIA Net+, and CompTIA Sec+.

Technical Standards and Essential Functions
Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program satisfactorily.

1. Strong problem solving, communication and analytical skills
2. Must be able to analyze a system's problem and apply principles of computing, networking, and security to identify solutions.
3. Must be able to describe and explain the fundamentals of networking, security, hardware, and software.

COMPUTER SUPPORT SPECIALIST

#	Course	Title	Hrs	Theory/ Lab	% On Campus/Online	Semester Credit Hours
1	CPMT 1401	A+ Core 1: Computer Infrastructure	120	40/80	100/0	5.0
2	CPMT 1441	A+ Core 2: Operating Systems and Security	120	40/80	100/0	5.0
3	ITNW 1451	Fundamentals of Networks	120	40/80	100/0	5.0
4	ITSY 1401	Security Fundamentals	120	40/80	100/0	5.0
Total Hours and Credits – Computer Support Specialist			**480**	**160/320**		**20.0**

NOTE: *All courses are taught in sequential order*

COMPUTER SUPPORT SPECIALIST COURSE DESCRIPTIONS

CPMT 1401 A+ Core 1: Computer Infrastructure 40/80/5.0
This is an entry-level course that will help the students to understand and explain the computer components, how are assembled, install software including an operating system, and install and connect peripherals and network devices. In addition to this, students will use simulation and virtual software to troubleshoot different scenarios. Students will have ample lab time to reinforce learning in each process.

CPMT 1441 A+ Core 2: Operating Systems and Security 40/80/5.0
Upon completion of this course, students will be able to diagnose, analyze and repair a basic computer system. They will develop critical thinking skills to apply troubleshooting techniques and procedures by using simulation software. Students will identify security vulnerabilities in hardware and software and recognize different protocols and terminology used in networking. Students will have ample lab time to reinforce learning in each process.

ITNW 1451 Fundamentals of Networks 40/80/5.0
At the end of this course, the student will be able to identify and explain network terminology, the purpose of ports, protocols, hardware, and software that is used in computer networks. The students will demonstrate how to assign IP addresses, install and configure protocols, and different network topologies and how to use the appropriate documentation and diagrams to manage and troubleshoot network connectivity and security. Students will have ample lab time to reinforce learning in each process.

ITSY 1401 Security Fundamentals 40/80/5.0
This course will provide the students with the knowledge and virtual tools necessary to compare the different types of attacks, use some penetration tests to identify sources of computer threats, analyze different scenarios to detect the type of malware, and scan other vulnerabilities. The students will implement secure protocols and apply procedures to secure and monitor audit logs and set system administrator alerts and develop an organizational operating system security plan that provides for periodic reviews of security policies, procedures, authorized users list, and software update patches. Students will have ample lab time to reinforce learning in each process.

LINEWORKER

Available at 13511 Montana Ave. – Satellite Campus (El Paso Electric Company)

Current or former employees, stock footage, and/or paid talent are portrayed in these images

CAREER OPPORTUNITIES IN LINEWORKER

Electrical power-line installers and repairers install, or repair cables or wires used in electrical power or distribution systems. Electrical power-line installers and repairers encounter serious hazards on the job, including working with high-voltage electricity, often at great heights. The work also can be physically demanding. Most electrical power-line installers and repairers work full time, and some work more than 40 hours per week. To enter the occupation, electrical power-line installers and repairers typically need a high school diploma or equivalent. To become proficient, they typically require technical instruction and on-the-job training. Apprenticeships are common. The median annual wage for electrical power-line installers and repairers was $85,420 in May 2023. Employment of electrical power-line installers and repairers is projected to grow 8 percent from 2023 to 2033, faster than the average for all occupations. About 10,700 openings for electrical power-line installers and repairers are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	**Texas**
Labor Market Information Employment 2024	48
Projected Employment 2035	62
Average Hourly Wage 2024	$23.18
Average Openings per Year	7
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

LINEWORKER
COURSES 1-9
504 CLOCK HOURS
21.0 SEMESTER CREDIT HOURS

EDUCATIONAL OBJECTIVES

The graduate of this program will gain valuable knowledge in installing and repairing electrical devices, understanding of basic electricity and electronics, pole climbing techniques, mathematics, first aid, CPR, electrical safety, use of hand tools. The graduate will also gain valuable hands-on experience in a diverse set of technical areas.

CERTIFICATIONS:

The experience gained from this program will prepare the student for the following professional certification examinations: First Aid Certification, CPR certification, and OSHA 10-Hour ET&D.

TECHNICAL STANDARDS AND ESSENTIAL FUNCTIONS

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program satisfactorily.

1. Must meet a 300 lbs. weight limit, to include equipment and tools.
2. Must be able to see details at close range (within a few feet of the observer).
3. Must possess sufficient finger dexterity and steadiness to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble objects.
4. Must possess sufficient manual dexterity and steadiness.
5. Must be able to perform physical activities that require considerable use of your arms and legs moving your whole body.
6. Must be able to operate computers and computer systems (including hardware and software), setup functions, enter data, or process information.
7. Must possess the ability to utilize computers and perform basic computer functions with programs in the Microsoft Suite, Word, Outlook, and Excel.
8. Ability to use hand tools.
9. Strong problem solving, communication and analytical skills.

LINEWORKER

#	Course	Title	Hrs.	Theory/Lab	Semester Credit Hours
1	ATM 131	Mathematics for Electrical Lineman	48	48/0	3.0
2	FCR 112	Competent First Responder	16	16/0	1.0
3	ELI 140	Electrical Lineman Introduction	90	10/80	3.0
4	ELM 141	Electrical Lineman I	90	10/80	3.0
5	ELE 131	Basic Electricity and Electronics	48	48/0	3.0
6	ELM 142	Electrical Lineman II	90	10/80	3.0
7	ELM 143	Electrical Lineman III	90	10/80	3.0
8	ELO 110	OSHA 10-Hour ET&D	16	16/0	1.0
9	EP 110	Employment Preparation	16	16/0	1.0
Total Hours and Credits – CERTIFICATE OF COMPLETION FOR LINEWORKER			**504**	**184/320**	**21.0**

NOTE: *All courses are taught in sequential order*

LINEWORKER COURSE DESCRIPTIONS

ATM 131 Mathematics for Electrical Lineman 48/0/3.0

Analysis and problem solving of technical problems using techniques of basic arithmetic and gradually incorporates algebraic material.

FCR 112 Competent First Responder 16/0/1.0

Students learn to safely perform as a competent first responder in an environment that requires use of basic first aid, and basic cardiopulmonary resuscitation (CPR). Successful completion of this course results in a nationally recognized first aid certification and a nationally recognized CPR certification.

ELI 140 Electrical Lineman Introduction 10/80/3.0

Students will learn proper methods for using their climbing gear and hand tools and must successfully complete climbing competency I. Students must show comprehension of the use of climbing gear and proper techniques for working from wood poles. Ascending, descending, and rotating at lower elevations of wood poles.

ELM 141 Electrical Lineman I 10/80/3.0

An introduction to transmission, sub-transmission, and distribution components used to construct lines and troubleshooting those components, to include the use of hot sticks and must successfully complete climbing competency II. Student must show comprehension of positioning and climbing techniques for working from wood poles. Ascending, descending, and rotating at higher elevations, enhancing pole-top work skills. Additional training on chainsaw safety, maintenance and use will be provided to the students, and must successfully complete chainsaw use competency.

ELE 131 Basic Electricity and Electronics 48/0/3.0

An introduction to electricity theory and practice, including electron theory, Ohm s law, series and parallel circuits, direct and alternating currents, magnetism, transformers, and practical applications.

ELM 142 Electrical Lineman II 10/80/3.0

Theory of power generation and distribution with emphasis on three phase systems to include transformers, voltage regulators, surge arrestors and must successfully complete climbing competency III. Student must show ability to perform work-related tasks at pole-top.

ELM 143 Electrical Lineman III 10/80/3.0

Practice in the installation of electrical power lines including transformers, voltage regulators, and surge arrestors. Also advanced hot sticking procedures, troubleshooting, underground systems procedures, and pole-top rescue. Pole-top and enclosed-space rescue competencies must be successfully completed.

ELO 110 OSHA 10-Hour ET&D 16/0/1.0

This certificate is earned upon successful completion of certified third-party OSHA trainer. Each successful participant will earn an OSHA Electrical Transmission and Distribution 10-hour card.

EP 110 Employment Preparation 16/0/1.0

This course will be spent in the classroom working on the skills needed to be successful in the workplace. Students will work on their interpersonal skills, to include soft skills and customer service skills. Students will learn how to prepare a functional resume and cover letter. Students will also work on their interview skills, and how to dress appropriately for an interview.

FCA MOPAR Automotive

Available at 9624 Plaza Circle - Main Campus

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities in the Automotive Industry

Automotive service technicians and mechanics inspect, maintain, and repair cars and light trucks. Most automotive service technicians and mechanics work in well-ventilated and well-lit repair shops. Although technicians often identify and fix automotive problems with computers, they commonly work with greasy parts and tools, sometimes in uncomfortable positions. Employers prefer that automotive service technicians and mechanics complete a program at a postsecondary institution. Industry certification is usually required once the person is employed. The median annual wage for automotive service technicians and mechanics was $47,770 in May 2023. Employment of automotive service technicians and mechanics is projected to grow 3 percent from 2023 to 2033, about as fast as the average for all occupations. About 67,800 openings for automotive service technicians and mechanics are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	**Texas**
Labor Market Information Employment 2024	1,626
Projected Employment 2025	1,908
Average Hourly Wage 2024	$18.19
Average Openings per year	178
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

FCA MOPAR AUTOMOTIVE
COURSES 1-7
600 CLOCK HOURS
24.0 SEMESTER CREDIT UNITS

Educational Objectives

The objective of the FCA-Mopar Automotive Certification program is to prepare the student to become an entry-level Mopar technician by providing the skills and knowledge to repair today's highly technical Mopar vehicles. The student will be trained in Mopar-specific diagnosis, service, and repair. Graduates of this program will be prepared for entry-level positions as technicians at FCA and Mopar dealerships.

Fiat Chrysler Automotive (FCA), MOPAR CAP Local School Training

There is great demand for *high quality and skilled* automotive technicians at FCA Dealerships. This demand has outpaced the number of technicians the regular OEM programs can produce and FCA (Fiat Chrysler Automobiles) is the first to look at high quality colleges to help their local dealers find the technicians they need. The foundational training that you receive in class paired with the factory FCA training sets you apart from the other applicants in the industry when applying at an FCA dealer. The fact that you will be able to show success and completion in actual dealership OEM training demonstrates your ability to learn and a solid baseline of technical knowledge. These credentials make you employable, more so than just a college education alone. Together they prepare you for success, right now and into the future. Chrysler modules are a ***required*** part of the program, and account for 30% of the student's grade. Successful graduates upon leaving the program who have completed Levels 0, 1 and 2 can then begin working at an FCA dealership *at a Level 2 and* complete the warranty work that comes into the Dealership.

The Service-to-Service Program

You Served Us. Now, Let Us Serve You: Western Technical College has partnered with Mopar CAP to provide soldiers transitioning out of the military in the Ft Bliss area an opportunity to obtain skills needed to work at Stellantis dealerships on some of the best brands in the industry – Chrysler, Dodge, Fiat, Jeep and Ram.

Certifications: Upon completion of this program, you will earn a Certificate of Completion and graduate as a Level 2 Technician with Mopar CAP.

Fast Track: We're driving futures forward….faster! You'll be graduating before you know it, allowing you to start working and doing what you love in only 12 weeks!

Learn from Experienced Instructional Faculty: Western Tech takes great pride in training. Our instructors not only have ASE certifications but have gone through specialized training directly with Mopar. Your training will consist of extensive 50-hour weeks that combine classroom theory and Real-World hands-on training directly on Mopar equipment. Our instructors are required to have recent and sufficient field experience and training before joining the Western Tech team. They share insights with our students that might otherwise take years to learn. We continually update our instructors with seminars and workshops to keep them abreast of new technology. In turn, they pass this knowledge on to our students. A large percentage of the instructional staff is Master Certified in all areas of the automobile.

Hit the Ground Working: Be work ready! For 80 years Mopar has been the parts, service and customer care division of the former Chrysler Corporation, now Stellantis. Mopar services parts for Dodge, Chrysler, Jeep, Ram and Fiat and has 1,100 Mopar Express Lane Service Drivers across the country. Mopar Cap has 2,500 dealerships nationwide. Before you graduate, you will have the opportunity to start interviewing and working with a dealership in your interested area.

Technical Standards and Essential Functions

Western Tech's FCA Mopar Automotive Certificate program has established technical standards and essential functions for the program as listed below. The ability to meet these standards and essential functions with or without reasonable accommodation is required to complete the program satisfactorily.

1. The ability to communicate effectively.
2. The ability to detect or tell the differences between sounds that vary in pitch and loudness.
3. The ability to see detail at close range (within a few feet of the observer).
4. The ability to match or detect differences between colors, including shades of color and brightness.
5. The ability to bend, stretch, twist, or reach with your body, arms, and/or legs.
6. The ability to adjust the controls of a machine or a vehicle quickly and repeatedly to exact positions.
7. The ability to exercise manual dexterity to use one or both hands and fingers skillfully.

8. The ability to use abdominal and lower back muscles to support part of the body repeatedly or continuously over time without "giving out" or fatiguing.
9. The ability to lift to 50 lbs.
10. The ability to utilize computers and perform basic computer functions with programs such as Word, Outlook, and Excel.
11. Ability to use hand tools
12. Strong problem solving, communication and analytical skills.

FCA Mopar Automotive

#	Course Codes	Course Title	Hours	Theory/Lab	% On Campus/Online	Semester Credit Units
1	FCA ELECT 101	Automotive Electronics	200	50/150	100/0	8.0
2	FCA HYB 106	High Voltage Propulsion	25	5/20	100/0	1.0
3	FCA G&D ENG 102	Gas & Diesel Engines Fundamentals	175	30/145	100/0	7.0
4	FCA BAC 103	Basic Automotive Air Conditioning	25	5/20	100/0	1.0
5	FCA BDT 104	Basic Drive Trains	25	5/20	100/0	1.0
6	FCA BSS 105	Basic Suspension & Steering	50	15/35	100/0	2.0
7	FCA ATT 107	Automatic Transmissions & Transaxle	100	30/70	100/0	4.0
Total Hours- FCA – Mopar Automotive Certificate			**600**	**150/450**		**24.0**

NOTE: *All courses are taught in sequential order*

FCA MOPAR AUTOMOTIVE COURSE DESCRIPTIONS

FCA ELECT 101 **Automotive Electronics** **50/150/8.0**

Upon completion of this course, students will be able to check basic electrical circuits with a test light and digital multi-meter and determine needed repairs; check supply voltage and voltage drop using a digital multi-meter (DVOM) and determine necessary repairs; measure and diagnose key-off battery drain; locate shorts, grounds, opens, and resistance problems in electrical circuits and determine necessary repairs; perform battery and starter tests; use wiring diagrams to diagnose starting and charging systems; inspect, test, and diagnose circuits and systems; diagnose failure of computerized engine controls with and without stored diagnostic trouble codes and determine needed repairs; inspect, test, adjust, and replace computerized engine control system sensors, actuators, and circuits; diagnose drivability and emission problems on vehicles with electronic ignition (distributor-less) systems and determine needed repair; diagnose hot or cold no starting, hard starting, incorrect idle speed, hesitation, misfire, power loss, and stalling and emission problems on computer-controlled vehicles; name the precautions that must be taken when working with or around high voltage electrical systems; describe how regenerative braking works; explain how the operation of accessories and auxiliary systems in a hybrid electric vehicle differ from those in an internal combustion engine vehicle and a battery electric vehicle; explain why high voltage is needed in assist-type vehicles; and demonstrate entry-level competence with the skills related to the courses and Mopar modules.

FCA HYB 106 **High Voltage Propulsion** **5/20/1.0**

This course introduces the fundamental principles of electric battery-operated hybrids. It covers hybrid safety, benefits, and the basic functions of various systems such as plug-in hybrids, battery electric, and E-torque systems. Topics include auxiliary systems like batteries, power brakes, steering, lighting, instrumentation, and HVAC. Students will learn to safely

disarm high-voltage systems and perform diagnostics and repairs on hybrid vehicles. Upon completion, students will be able to understand safety precautions for high voltage systems and explain regenerative braking. They will also be able to differentiate electric and internal combustion vehicles and follow safety procedures for electric vehicle repairs, compare accessory and auxiliary systems in hybrid vs. other vehicles. Also, understand high voltage in assist-type vehicles and follow proper servicing procedures for hybrid systems.

FCA G & D ENG 102 Gas & Diesel Engines Fundamentals 30/145/7.0

Upon completion of this course, students will be able to inspect, test, and repair cooling systems; mix coolant for gasoline and diesel engines using the correct proportions of water, antifreeze, and supplemental cooling system additives to meet manufacturer recommendations and ambient temperature requirements; inspect, test, and repair lubrication systems; inspect, test, and repair intake and exhaust systems; inspect, test, and repair engine-related electrical systems; inspect and test valve springs for squareness, pressure, and free-height comparison; adjust valves (mechanical or hydraulic lifters); remove and inspect cylinder heads for cracks and check gasket surface areas for warpage, leaks, and passage conditions; inspect crankshafts for surface cracks and journal damage; inspect pistons, rings, and wrist pins for wear and damage; inspect, repair, or replace fuel systems; prime and bleed a fuel system; diagnose, check, and repair or replace a primer pump; inspect, diagnose, test, adjust, repair and/or replace fuel injectors; diagnose, test, and service diesel emission systems; and demonstrate entry-level competency of the skills related to the courses and Mopar modules in this session.

FCA BAC 103 Basic Automotive Air Conditioning 5/20/1.0

Upon completion of this course, students will be able to conduct a performance test of the A/C system and determine needed repairs; perform a leak test on A/C system and determine needed repairs; diagnose A/C system problems that cause the protection devices (pressure thermal and PCM) to interrupt system operation and determine needed repairs; inspect, test, and replace A/C compressors, clutch components, or assemblies; inspect evaporator housing water drain and repair as needed; diagnose failures in the electrical controls of heating and A/C systems and determine needed repair; demonstrate entry-level competency with the skills related to the course and Mopar modules in this course.

FCA BDT 104 Basic Drive Trains 5/20/1.0

Upon completion of this course, students will be able to diagnose clutch noise, binding, slippage, pulsation, and chatter problems; diagnose transmission noise, hard shifting, jumping out of gear, and fluid leakage and determine the necessary repairs; disassemble, clean, and reassemble transmission components; diagnose front-wheel drive (FWD) and rear-wheel drive (RWD) shaft and universal/ constant velocity (CV) joint noise and vibration problems and determine the necessary repairs; inspect, adjust, and repair or replace the hydraulic slave and master cylinders, lines, and hoses; and demonstrate entry-level competency of the skills related to the course and Mopar modules in this course.

FCA BSS 105 Basic Suspension & Steering 15/35/2.0

Upon completion of this course, students will be able to remove, inspect, and replace steering and suspension components; inspect, remove, and replace shock absorbers and MacPherson struts; balance wheel and tire assembly (static and dynamic) utilizing the latest computerized balancing machines; perform a wheel alignment; and demonstrate entry-level competency of the skills related to the course and Mopar modules in this course.

FCA ATT 107 Automatic Transmissions & Transaxle 30/70/4.0

Upon completion of this course, students will be able to perform lock-up torque converter system tests and determine needed repairs; inspect, adjust, or replace manual shift valves and throttle linkages or cables and check gear-select indicators (as applicable); explain how Pascal's law applies to the operation of automatic transmissions; check torque converter stator clutch operation and measure torque converter endplay; remove, disassemble, clean, inspect, reassemble, and reinstall transmissions and transaxles; inspect, test, and replace electrical/ electronic transmissions and transaxles; retrieve trouble codes from common electronically controlled automatic transmissions switches and sensors; diagnose and recondition electronic automatic transmissions/transaxles; and demonstrate entry-level competency of the skills related to the courses and Mopar modules in this course.

MEDICAL BILLING AND CODING

Offered 100% online

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities for Medical Billing and Coding

Medical billers and coders compile, process, and maintain patient files. They typically spend many hours at a computer, and most work full time. Positions include records coder, claims examiner, medical biller, medical secretary, medical biller, medical biller, collection specialist, insurance specialist, medical records clerk, claims adjuster, medical office manager and compliance officer. They need a post-secondary certificate to enter the occupation, although some qualify with a high school diploma. Others might need an associate's or bachelor's degree. Certification may be required or preferred. The median annual wage for medical records specialists was $48,780 in May 2023. Employment of medical records specialists is projected to grow 9 percent from 2023 to 2033, much faster than the average for all occupations. About 15,000 openings for medical records specialists are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2023 thru 2033 Projections)	**Texas**
Labor Market Information Employment 2024	697
Projected Employment 2035	211
Average Hourly Wage 2024	$17.54
Average Openings per year	225
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

MEDICAL BILLING AND CODING

COURSES 1-12
1060 CLOCK HOURS
41.0 SEMESTER CREDIT HOURS

Educational Objectives

The Medical Billing and Coding program is designed to prepare the individual for entry-level employment. Various occupation settings include private healthcare practices, clinics, hospitals, government agencies, skilled nursing facilities, insurance companies, consulting firms, and other healthcare facilities. The program teaches students how to evaluate coding and billing practices and provides tools for developing compliance programs that will help minimize the risk of investigation.

The program balances knowledge of medical technical skills, and coding experience with assessment evaluations by professional coding instructors who care about a student's success. The practical approach takes students through a careful step-by-step study of what medical coders and billers need to get the job done right.

Certification and Examination

The following certification examinations are available, and students are encouraged to choose one or the other for Certification.

- American Academy of Professional Coders (AAPC), CPC-A (Professional Coder Apprentice)
- American Health Information Management Association (AHIMA), CCA (Certified Coding Associate)

Technical Standards and Essential Functions

Students entering this program must be able to meet the following standards and perform essential functions with or without reasonable accommodations to be successful in completing this program satisfactorily.

1. Must have a foundational understanding of computer operations, managing files and folders, and navigating the operating system.
2. Familiarity with web browsers (e.g., Chrome, Microsoft Edge, Safari) and internet search engines to locate, evaluate, and utilize online resources effectively.
3. Must have reliable access to high-speed internet and be able to connect to the internet independently.
4. Must possess skills in organizing digital files and folders, maintaining an updated calendar or task list, and prioritizing assignments to meet deadlines effectively.
5. Demonstrate excellent listening, comprehension and communication (written and verbal).
6. Satisfactory visual acuity for reading and documenting patient charts and creating patient accounts.
7. The ability to tolerate sitting and/or standing for extended periods of time without a break.
   Students will use confidentiality standards in accordance with professional health care environments about other students and/or internship patients.
8. Utilize computers and perform basic computer functions with programs such as Word, Outlook, and Excel.
9. Strong problem solving, communication and analytical skills.

MEDICAL BILLING AND CODING

#	Course	Course Title	Hrs.	Theory/ Lab	Semester Credit Hours
1	FOU 101	Foundations	48	26/22	2.0
2	MTAP 1401	Medical Terminology / Anatomy & Physiology	100	15/85	3.5
3	MTAP 1402	Medical Terminology / Anatomy & Physiology	100	15/85	3.5
4	ICPT 1401	Introduction to Coding Principles & Theory	100	45/55	4.5
5	ICPT 1402	Introduction to Coding Principles & Theory	100	45/55	4.5
6	HC 1401	Health Claims	100	15/85	3.5
7	HC 1402	Health Claims	100	15/85	3.5
8	AACPT 1402	Advanced Coding Principles & Theory	100	15/85	3.5
9	DC 1401	Diagnostic Coding	100	15/85	3.5
10	AAPCT 1403	Advanced Coding Principles & Theory	100	30/70	3.5
11	MRC 1301	Medical Record Coder	80	30/50	3.5
12	CD 100	Career Development	32	16/16	2.0
Total Hours and Credits – Certificate of Completion in Medical Billing & Coding			**1060**	**282/778**	**41.0**

NOTE: *All courses are taught in sequential order*

MEDICAL BILLING AND CODING COURSE DESCRIPTIONS

FOU 101 Foundations 26/22/2.0

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

MTAP 1401 Medical Terminology / Anatomy & Physiology 15/85/3.5

Upon completion of this course, the student will be able to utilize terminology related to various body systems, diseases, diagnostic procedures, and treatments; use the correct anatomical language used by healthcare professionals to describe body planes, directions, and cavities; and accurately use medical terminology to demonstrate a basic understanding of how the body's systems contribute to overall health and function.

MTAP 1402 Medical Terminology / Anatomy & Physiology 15/85/3.5

Upon completion of this course, the student will be able to exploring complex systems and use terminology relevant to advanced medical practice and understanding; explain intricate aspects of the nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems; describe the ways in which their interconnections contribute to overall bodily functions; describe how normal physiological processes are altered in disease states; explain common conditions affecting each of the major body systems, including their symptoms, causes, and impacts on health; demonstrate proficiency in the use of advanced medical terminology; and analyze complex physiological processes and their alterations in disease.

ICPT 1401 Introduction to Coding Principles & Theory 45/55/4.5

Upon completion of this course, the student will be able to use the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) and assign accurate diagnostic codes in a healthcare setting.

ICPT 1402 Introduction to Coding Principles & Theory 45/55/4.5

Upon completion of this course, the student will be able to use both diagnostic (ICD-10-CM) and procedural (CPT) coding systems, as well as insurance billing and plan management to include CMS-1500; explain the key concepts and practices in insurance billing and insurance plans; explain the structure and format of CPT codes, including categories I, II, and III, and the importance of accurate procedure coding for billing and reimbursement; work with various types of insurance plans, including private insurance, Medicare, Medicaid, HMOs, PPOs, and other managed care plans;. and explain differences in coverage, reimbursement rates, and billing requirements for each plan.

HC 1401 Health Claims 15/85/3.5

Upon completion of this course, the student will be able to explain the practical application of medical coding and insurance billing; utilize the Healthcare Common Procedure Coding System (HCPCS) to assure the proper completion of CMS-1500 forms; process health claims accurately and navigate the complexities of the healthcare reimbursement process; explain the guidelines for selecting HCPCS codes, including those for durable medical equipment (DME), prosthetics, orthotics, and supplies (DMEPOS), as well as other non-physician services; properly assign HCPCS codes to ensure accurate billing and reimbursement; and demonstrate ethical practices in health claims processing, including adherence to coding and billing regulations, accurate representation of services provided, and the avoidance of fraudulent billing practices.

HC1402 Health Claims 15/85/3.5

Upon completion of this course, the student will be able to utilize Electronic Health Records (EHR); explain how the fundamentals of EHR systems integrate into various aspects of a medical office; identify and use the key

components and features of EHR systems, including patient demographics, medical history, clinical documentation, medication management, lab results, and imaging; explain how these elements are organized and accessed within an EHR; and explain how EHRs can reduce errors and delays in the claims process, leading to faster reimbursement.

AACPT 1402 Advanced Coding Principles & Theory 15/85/4.0

Upon completion of this course, the student will be able to meet the challenges of professional coding in various healthcare settings, including inpatient and outpatient visits, emergency care, surgical procedures, and specialized treatment; describe the intricate relationship between coding and health insurance; utilize specific coding requirements for various insurance plans, including Medicare, Medicaid, private insurers, and managed care organizations; navigate different payer rules and guidelines to ensure accurate and timely reimbursement; and complete a research paper on a medical diagnosis.

DC 1401 Diagnostic Coding 15/85/3.5

Upon completion of this course, the student will be able to assign accurate diagnostic codes; audit real-world medical scenarios; review and verify the accuracy of coding in various clinical situations; utilize each section of the Current Procedural Terminology (CPT) manual to conduct precise coding audits and improve documentation accuracy; check for correct code usage, sequence of codes, and alignment with clinical documentation; ensure that clinical documentation supports the codes assigned and meets regulatory and payer requirements; identify common coding errors and discrepancies during audits; use best practices for correcting these errors; provide feedback to healthcare providers; and update documentation to reflect accurate coding.

AACPT 1403 Advanced Coding Principles & Theory 30/70/4.0

Upon completion of this course, the student will be able to review and verify the accuracy of assigned codes; identify and correct common coding errors found during audits; utilize strategies for addressing discrepancies, communicating with healthcare providers, and updating documentation to ensure accurate coding and billing; perform coding audits, applying their knowledge to real-world medical scenarios; gain proficiency in auditing complex medical scenarios and verifying the accuracy of CPT codes; use the CPT manual to ensure compliance and proper reimbursement; and explain advanced roles in medical coding and auditing.

MRC 1301 Medical Record Coder 30/50/3.5

Upon completion of this course, the student will be able to sit for the AAPC (American Academy of Professional Coders) National Exam, equipped with the knowledge, skills, and strategies needed to achieve certification as a professional medical coder; master timed coding assignments designed to simulate the exam environment; manage their time effectively to complete the exam within the allotted time frame; utilize test-taking strategies specifically tailored for the AAPC exam; and demonstrate mastery of the skills of abstracting claims, identifying and correcting errors, and managing denied claims

CD 100 Career Development 16/16/1.5

Upon completion of this course, the student will be able to utilize tools and strategies such as job search techniques; cover letter and references list writing; interview skills, and professional networking, including how to connect with industry professionals, attend networking events, and leverage online platforms such as LinkedIn.

MEDICAL CLINICAL ASSISTANT

Available at 9624 Plaza Circle – Main Campus

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities for Medical Clinical Assistant

Medical assistants complete administrative and clinical tasks, such as scheduling appointments and taking patients' vital signs. Most medical assistants work full-time. Positions include medical office specialist, front and back medical assistant, donar processor, phlebotomist, medical receptionist, lab assistant, EKG technician and patient care technician. They are employed in physicians' offices, hospitals, outpatient clinics, and other healthcare facilities. Medical assistants typically need post-secondary education, such as a certificate. Some enter the occupation with a high school diploma and learn through on-the-job training. The median annual wage for medical assistants was $42,000 in May 2023. Employment of medical assistants is projected to grow 15 percent from 2023 to 2033, much faster than the average for all occupations. About 119,800 openings for medical assistants are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	2,859
Projected Employment 2035	3,449
Average Hourly Wage 2024	$17.54
Average Openings per year	461
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

Mission Statement of the Medical Clinical Assistant Program

The mission of Medical/Clinical Assistant faculty and staff is to produce competent entry-level medical assistants with the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains needed in the medical community.

MEDICAL/CLINICAL ASSISTANT
COURSES 1-10
900 CLOCK HOURS
38.0 SEMESTER CREDIT HOURS

Educational Objectives

This program will cross train students for multiple skills areas, so they can obtain employment as a medical assistant. Students will receive 900 hours of comprehensive training in medical terminology, anatomy and physiology, concepts of effective communication, basic finances, third-party reimbursement, procedural and diagnostic coding, legal and ethical implications, applied mathematics, infection control and nutrition. Students will work with electronic health records charting, patient data collection, clinical duties with special focus on

phlebotomy and EKG, all incorporated into the training and will complete 184 hours of internship.

The following certification examinations are offered through the National Healthcareer Association (NHA):

- Certified Phlebotomy Technician
- Certified Electrocardiograph Technician
- Certified Clinical Medical Assistant
- Certified Medical Administrative Assistant

The faculty's goal is to train students to have the qualifications and training that allow them the option of choosing the clinical setting in which they would prefer to work in physicians' offices, clinics, and/or hospitals. Students will gain expertise to provide effective clinical and administrative skills.

Upon satisfactory completion of the training, students will be qualified to assume entry-level positions as a Medical/Clinical Assistants performing the medical procedures, lab techniques, and front office duties described above.

Note: Students are required to demonstrate proficiency in both the psychomotor and affective competencies during each course. An inability to achieve the required level of competency will prevent the student from passing the course even if the overall grade for the course is "passing." For example, if a student has an overall score of 75% in the course but fails a psychomotor or affective competency, they will have to repeat the course.

Note: Students enrolled into the first course (AP101) must achieve a 70% academic score by day 14 or be cancelled from the program.

Technical Standards and Essential Functions

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program satisfactorily.

1. Must be able to communicate effectively (written and verbal)
2. Must be able to uphold confidentiality standards in accordance with professional healthcare environments and always maintain a professional demeanor while interacting with fellow students, internship site employees and clientele, administration, and faculty.
3. Students must display a professional demeanor and use language, and conduct that fosters a safe, productive, and ethical learning environment for them and other students enrolled in the program.
4. Students must be able to transfer patients safely from a variety of surfaces, e.g., wheelchairs and beds, and be able to lift equipment needed for patient care.
5. Possess sufficient manual dexterity and steadiness
6. Possess visual and hearing acuity for reading, listening, and documenting in patient charts and administering treatment.
7. Be able to tolerate sitting and/or standing for extended periods of time without a break.
8. Be able to provide and receive needle sticks, to include injections and blood draws without any restriction.
9. Possess sufficient finger dexterity and steadiness to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
10. Possess sufficient manual dexterity, strength, and steadiness.
11. Be able to use abdominal and lower back muscles to support and balance part of the body repeatedly or continuously over time without "giving out" or fatiguing.
12. Be able to work in a structured self-paced program.
13. Be able to lift to 50 lbs.
14. Be able to use computers and perform basic computer functions with programs such as Word, Outlook, and Excel
15. Strong problem solving, communication and analytical skills

MEDICAL/CLINICAL ASSISTANT

#	Course	Course Title	Hrs.	Theory/ Lab/Int	% On-Ground/ Online	Semester Credit Hours
1	FOU 101	Foundations	48	32/16	100/0	2.0
2	AP101	Anatomy & Physiology/ Medical Terminology	96	50/46	80/20	4.5
3	MF102	Medical/Clinical Assistant Fundamentals	96	50/46	80/20	4.5
4	IB103	Medical Insurance/ Bookkeeping & Billing	96	50/46	80/20	4.5
5	CL101	Clinical I	96	50/46	80/20	4.5
6	CL103	ECG/CPR	96	50/46	80/20	4.5
7	CD 100	Career Development	32	32/0	100/00	1.5
8	CL102	Phlebotomy	126	66/60	80/20	6.0
9	CR 101	Credentialing Review	30	30/0	100/0	2.0
*10	INT 105	Internship	184	0/0/184	00/00	4.0
Total Hours and Credits - Certificate of Completion in Medical Clinical Assistant			**900**	**410/306/184**		**38.0**

NOTE: *All courses are taught in sequential order*

MEDICAL CLINICAL ASSISTANT COURSE DESCRIPTIONS

FOU 101 FOUNDATIONS 32/16/2.0

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

AP 101 ANATOMY & PHYSIOLOGY MEDICAL TERMINOLOGY 50/46/4.5

Upon completion of this course, students will be able to understand anatomical structures and functions of the digestive, urinary, reproductive, cardiovascular, respiratory, blood, lymphatic, immune, nervous, integumentary, and the endocrine systems and of female and male reproductive systems; use medical terms, word parts, word roots, prefixes, suffixes, and pronunciation and determine the meanings of the basic word parts, spelling, diagnosis procedures, and medical specialties; dissect various organ; and practice proper handwashing techniques. Further, students will use medical terms that describe positions, directions, planes, and cavities of the body; name the organs of each system and describe their locations and functions, various pathological conditions affecting each system, and detail the meanings of combining forms, prefixes, and suffixes of the system's terminology; Students will be able list and explain some clinical procedures, lab tests, and abbreviations that pertain to the systems and build and analyze medical terms.

MF 102 MEDICAL CLINICAL ASSISTANT FUNDAMENTALS 50/46/4.5

this course will acquaint the student with basic concepts of working in a medical office to include professional and career responsibilities. Develop interpersonal communication through telephone procedures, appointment setting and learning receptionist duties. Learn to maintain and file drug and prescription records. Also gain first-hand knowledge of written communication consisting of written correspondence, processing mail and telecommunication and professional reports. Learn professionalism skills in the allied health professions.

Upon completion of this course, students will be able to understand the importance of exercising interpersonal communication, perform appointment scheduling, create a patient file including SOAP notes, and maintain and file medical records. Students will also be able to demonstrate proper telephone etiquette and have a better understanding of employer expectations.

IB 103 MEDICAL INSURANCE / BOOKKEEPING & BILLING 50/46/4.5

Upon completion of this course students will be able to use the CMS-1500 claim form, obtain reimbursement through accurate claim submissions using the CMS-1500 claim form, perform basic procedural and diagnostic coding, demonstrate accounts receivable and accounts payable procedures, and use a physician's fee schedule; describe the skills and knowledge of financial management and health insurance as they relate to daily functions in a medical office; file accurate claim forms for insurance reimbursement; use ICD-10-CM, CPT, and HCPS coding systems; manage records including patients' medical records through manual and electronic charting; describe legal guidelines/requirements for healthcare and principles of ethical medical decision making; and follow HIPAA guidelines (may become eligible for certificates of completion).

CL 101 CLINICAL I 50/46/4.5

Upon completion of this course students will be able to apply principles of aseptic technique and infection control; use an autoclave; identify and care for instruments used; practice medical asepsis and sterilization methods and take measurements and vital signs; take a medical history, prepare patients for examinations, assist a physician and the patient with those examinations; explain the principles of pharmacology and how to dispense medication under the direct supervision of a physician; provide instructions and teaching for health maintenance and disease prevention; assist with physical examinations and minor surgery.

CL 103 ECG/CPR 50/46/4.5

Upon completion of this course students will be able to explain electrocardiography (ECG) and the basic principles of the cardiovascular system; set up and operate ECG equipment; perform an electroencephalogram (EEG), identify normal and abnormal heart rhythms, detect and distinguish arrhythmias; provide patient instruction and procedural considerations; use lead systems and placement and identifying rhythms; explain the importance of quality assurance and continual quality improvement; perform CPR and offer first aid; perform spirometry, peak-flow, and nebulizer treatment; list and describe facets of health maintenance such as body ergonomics, dietary nutrients and needs, exercise, self-examination techniques, rehabilitation, and healthy living.

CD 100 CAREER DEVELOPMENT 32/0/1.5

Upon completion of this course, students will be able to produce a resume, cover letter, reference list, and relevant documentation in alignment with their career field and personal background. Students will learn and apply techniques concerning the job search process, navigation of electronic and traditional employment applications, various forms of interviews, and follow-up correspondence. Students will utilize research methods in preparation for successful interviews, career mobility, and advancement.

CL 102 PHLEBOTOMY 66/60/6.0

Upon completion of this course students will be able to link basic human anatomy and physiology and anatomy and physiology of the circulatory system; operate phlebotomy equipment; demonstrate phlebotomy techniques and safety; practice customer service and elicit patient compliance; describe considerations and preparation given to specimens, including handling and special procedures and challenges; and explain with legal and ethical issues.

Upon completion of this course, students will be able to perform capillary and veni-punctures, use methods of quality control in the lab and demonstrate proper documentation, collect and process blood, urine, and other specimens for testing; implement CLIA and OSHA guidelines; obtain various specimens for microbiological, serology, hematology testing, screen, and use follow-up test results.

CR 101 **CREDENTIALING REVIEW** **30/0/2.0**

Upon completion of this course, the students will be able to pass the CCMA certification examination. Using the NHA study guide, students will be able to describe the healthcare system and setting, use proper medical terminology; explain basic pharmacology; describe how psychology is used in the healthcare setting; describe body structures and organ systems; identify pathophysiology and disease processes; microbiology, describe general patient care; explain infection control; test land laboratory procedures; perform phlebotomy, EKG and cardiovascular testing; describe patient care coordination and education; define administrative assisting; practice good communication and offer customer service; and explain the roles of medical law and ethics in the clinical setting. Students will be able to pass a practice examination in preparation for the CCMA.

INT 105 **INTERNSHIP** **0/0/168/3.5**

Upon completion of this course, students will be able to demonstrate effective customer service skills, recognize areas that need improvement in performance and knowledge; apply technical skills learned in the classroom in both the administrative and clinical areas, obtain a satisfactory grade on their final evaluation, and demonstrate how to properly interact with patients; establish a network of support through colleagues; follow legal guidelines/requirements for healthcare and principles of medical ethics and decision making; demonstrate understanding of concepts of mental health and applied psychology; recognize, and respond to verbal and nonverbal communication; demonstrate proper telephone etiquette to include triaging and responding appropriately to emergency calls; check patients in for office visits; establish, maintain, and file patient medical records and schedule appointments and demonstrate their knowledge of Electronic Health Records; Upon the conclusion of the experience, students will update their resumes and submit a final copy to the program director and career services.

NOTE: Students must complete the eight core courses before being placed at an internship site. The 168 hours that make up the internship will enable the student to apply in the work environment the knowledge and skills learned throughout the training for theoretical and clinical settings. The student, with no financial remuneration, will be placed in a medical office or clinic under close supervision to ensure that program objectives are being met.

ASSOCIATE OF OCCUPATIONAL STUDIES DEGREES

AUTOMOTIVE TECHNOLOGY

Available at 9624 Plaza Circle - Main Campus

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities in Automotive Technology

Automotive service technicians and mechanics inspect, maintain, and repair cars and light trucks. Most automotive service technicians and mechanics work in well-ventilated and well-lit repair shops. Although technicians often identify and fix automotive problems with computers, they commonly work with greasy parts and tools, sometimes in uncomfortable positions. Employers prefer that automotive service technicians and mechanics complete a program at a postsecondary institution. Career opportunities include automotive technician, diagnostician, service writer, transmission specialist, brake and wheel alignment specialist, import specialist, engine builder, light duty diesel technician, performance tuning technician and EV technician. Industry certification is usually required once the person is employed. The median annual wage for automotive service technicians and mechanics was $47,770 in May 2023. Employment of automotive service technicians and mechanics is projected to grow 3 percent from 2023 to 2033, about as fast as the average for all occupations. About 67,800 openings for automotive service technicians and mechanics are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	**Texas**
Labor Market Information Employment 2024	1,626
Projected Employment 2035	1,908
Average Hourly Wage 2024	$18.19
Average Openings per year	178
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

AUTOMOTIVE SERVICE EXCELLENCE (ASE) EDUCATION FOUNDATION ACCREDITED PROGRAM IN AUTOMOTIVE TECHNOLOGY

ASE | Education Foundation

WHAT DOES ASE MASTER LEVEL ACCREDITED IN AUTOMOTIVE MEAN?

Automotive Service Excellence Education Foundation Master Level Accredited in Automotive means that WTC's Automotive Technology program has been accredited by ASE Education Foundation in the following subject areas:

A1. Engine Repair
A2. Automatic Transmission/Transaxle
A3. Manual Drive Train and Axles
A4. Suspension and Steering
A5. Brakes
A6. Electrical/Electronic Systems
A7. Heating and Air Conditioning
A8. Engine Performance

How did WTC's Automotive Program become ASE Education Foundation Accredited?
WTC completed an extensive evaluation and application process. Upon ASE Education Foundation review, an evaluation team conducted an on-site inspection of our campus to review the curriculum, teaching techniques, equipment and training aids, task sheets, tools, budget, and safety measures. WTC remains one of the few private career schools in the nation to be ASE Education Foundation Master LEVEL ACCREDITED in Automotive.

How does a WTC Graduate Benefit from an ASE Education Foundation Master Level Accredited Program?
To become ASE Certified, a person must have two years' work experience and pass ASE certification examinations. A graduate of the school's ASE Master Level Accredited program can substitute the training for one year of work experience toward ASE's two-year work requirement. In addition, information covered in the curriculum helps to prepare students to take the ASE examinations.

Experienced Instructor Staff
Our instructors are required to have recent and sufficient field experience and training before joining the WTC team. They share insights with our students that might otherwise take years to learn. We continually update our instructors with seminars and workshops to keep them abreast of new technology. In turn, they pass this knowledge on to our students. All of WTC's automotive instructors are required to be ASE Certified. A large percentage of the instructional staff is Master Certified in all areas of the automobile.

ASE Education Foundation Master Level Accredited
WTC is one of the few private career schools in the nation to offer an automotive program that is Master Level Accredited by the ASE Education Foundation.

Custom Training Group
If minimum qualifications are met, students who complete WTC's Automotive Technology program may be accepted for one of the following manufacturer's training programs: Audi TTC, Volkswagen VSTT, BMW STEP, Mercedes-Benz ELITE, and Volvo.

National Hot Rod Association (NHRA) Industry Partnership
Provide students with the skills and knowledge needed to repair todays highly technical vehicles as an entry level automotive technician. Training incudes automotive electronics and computer systems, fuel and emissions systems, steering and suspension, brakes, air conditioning, engine rebuild, diagnosis and drive trains.

How to Participate in Original Equipment Manufacturer (OEM) Training Programs
Participation in these programs is available to graduates of WTC's Automotive Technology Program. Graduates must pass a written test and sit for an interview with the Custom Training Group (CTG). Only students with outstanding attendance records, grades, and attitudes may take the test. If selected, the student's tuition will be paid by the manufacturer. After completing the training, CTG assists the graduates by sending their résumés to all its participating dealerships.

FLAT Chrysler Automotive (FCA), MOPAR CAP Local School Training
There is great demand for high quality and skilled automotive technicians. This demand has outpaced the number of technicians the regular OEM programs can produce and FCA (Fiat Chrysler Automobiles) is the first to look at high quality colleges to help their local dealers find the technicians they need. The foundational training that you receive in class paired with the factory FCA training sets you apart from the other applicants in the industry, whether applying

at a FCA dealer or not. The fact that the student will be able to show success and completion in actual dealership OEM training demonstrates your ability to learn and a solid baseline of technical knowledge. These credentials make you employable, more so than just a college education alone. Together they prepare you for success right now and into the future. Chrysler modules are a required part of the program, and accounts for 10% of the student's grade. Successful graduates upon leaving the program who have completed Level 0 and 1 can then begin working at an FCA dealership at a Level 2 status, and complete 80-90% of the warranty work that comes in while continuing to be trained in Level 2. This is the great value in the CAP Local program. Even if the graduate does not choose an FCA dealership, the OEM training they have received will look good on a resume and demonstrates their ability to complete factory training.

Ford | New Ford Tech ACE

Ford ACE Program
Students have access to an online portal that allows them to take courses on various topics, including New Model Training, Electrical Systems Engineering, History of Ford Motor Company, and Steering & Suspension. These courses are the same curriculum that certified Ford/ Lincoln technicians receive. Courses are continually updated to stay up to date with new technologies and new vehicle releases. The dealership partnership with the school provides unique career discovery, hands-on learning, and immediate job opportunities.

WTC has partnered with Toyota for the Toyota Certification Program.

TECS TECHNICIAN EDUCATION COLLEGE SUPPORT | TOYOTA | SU SUBARU UNIVERSITY | MOPAR CAP CAREER AUTOMOTIVE PROGRAM LOCAL

AUTOMOTIVE TECHNOLOGY
COURSES 1-17
1524 CLOCK HOURS
63.0 SEMESTER CREDIT HOURS

Educational Objectives
The objective of the Automotive Technology Program is to train students to become entry-level automotive technicians by providing them with the skills and knowledge to repair today's highly technical automobiles. Students are trained in automotive electronics and computer systems, diagnosis, engine rebuild, fuel and emission systems, air conditioning, brakes, steering and suspension, and drive trains. Students will learn the soft skills needed to be successful in the automotive workplace to include applied math, business writing and psychology.

Technical Standards and Essential Functions
Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program satisfactorily.

1. The ability to detect or tell the differences between sounds that vary in pitch and loudness.
2. The ability to decipher detail in short range (within a few feet from the observer).
3. The ability to sit for long periods of time.
4. The ability to stand for long periods of time.
5. Sufficient manual dexterity, strength, and steadiness.
6. The ability to climb steps.
7. Close-range vision and color differentiation.
8. Sufficient flexibility and to bend, stretch, twist, or reach with arms extended, and/or legs.

9. The ability to adjust the controls of a vehicle quickly and repeatedly to exact positions.
10. The ability to lift to 50 pounds.
11. Ability to use hand tools
12. Strong problem solving, communication and analytical skills

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

AUTOMOTIVE TECHNOLOGY

#	Course Number	Automotive Technology Course Title	Course Number for Electives	Performance Tuning Course Title	Hrs.	Theory/ Lab/Int	%On Campus / Online	Semester Credit Units
1	FOU 101	Foundations			48	26/22	80/20	2.0
2	ES 101	Electronics			96	38/58	80/20	4.0
3	FS 102	Fuel Systems			48	26/22	80/20	2.0
4	AD 103	Engine Diagnosis			96	38/58	80/20	4.0
5	EN 104	Engine Repair			96	38/58	80/20	4.0
6	BWE 102	Business Writing			48	26/22	80/20	2.0
7	BR105	Brake Systems			96	38/58	80/20	4.0
8	AMA102	Applied Mathematics I			48	30/18	80/20	2.5
	AT106	Automatic Transmissions			96	38/58	80/20	4.0
	AMA103	Applied Mathematics II			48	30/18	80/20	2.5
9	PT107	Powertrain			96	38/58	80/20	4.0
10	AC108	HVAC I			48	34/14	80/20	2.5
11	AC109	HVAC II			48	26/22	80/20	2.5
12	SAS110	Steering & Suspension			96	50/46	80/20	4.5
13	LDD200	Light Duty Diesel Fuel and Emissions Systems	PT200	Forced Induction & Engine Enhancements	96	50/46	80/20	4.5
14	LDD 201	Light Duty Diesel Engines	PT 201	Performance Brakes & Suspension	48	26/22	80/20	2.0
15	ADV202	Advanced Diagnostics/EV and Hybrid Technology	PT202	Performance Engine Management Systems	96	50/46	80/20	4.5

16	COMM 200	Human Communications			48	26/22	80/20	2.0
17	IN 203	Career Development & Internship			228	24/8 196	00/00	5.5
Total Hours and Credits - AOS Degree in Automotive Technology					**1524**	**652/ 676/ 196**		**63.0**

AUTOMOTIVE TECHNOLOGY COURSE DESCRIPTIONS

FOU 101 **FOUNDATIONS** **26/22/2.0**

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

ES101 **ELECTRONICS** **38/58 4.0**

This course will introduce the student to the fundamental principles of the automobile's electrical and electronic systems. The course covers the various types of electrical circuits and how they operate, as well as the theories and laws which dictate electrical circuit behavior. The student will also learn the fundamentals of design, construction, and operation of electrical components, meters, wiring, and circuit diagrams. The student will learn the concepts and functions of the body control module (BCM), advanced lighting circuits, electronic and conventional analog instrumentation, indicator lights, warning lights, electrical accessories, and direct current motors. Starting and charging systems will also be covered.

This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

FS102 **FUEL SYSTEMS** **26/22 2.0**

The student will be introduced to the fundamentals of design, construction, and operation of the internal combustion, spark ignition engine's basic fuel and emission control systems. Automotive safety and the basic engine theories and laws, which govern the formulas concerning force, work, torque, and power, will be covered. This course will cover the fundamental principles of the following systems: electronic fuel injection, air intake, idle speed control, spark timing control, positive crankcase ventilation, intake manifold heat control, fuel pumps, fuel tanks, lines, and filters. This course includes Mopar, Ford and Toyota training modules. The student can expect 16 hours of homework during this course.

AD103 **ENGINE DIAGNOSIS** **38/58 4.0**

This course will review the diagnosis procedures for the basic systems related to the automotive engine. The course will cover the use of diagnostic test tools and scanners to detect and interpret diagnostic trouble codes (DTC) and apply the necessary repairs. The student will be required to use various test equipment to analyze emission levels and determine the cause of abnormal emission readings. The student will practice automotive safety procedures and perform diagnosis on the following engine systems: cooling, lubrication, ignition, emission controls, spark timing controls, intake, and manifold heat controls. Engine tune up procedures will also be covered during this course. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

EN104 **ENGINE REPAIR** **38/58 4.0**

The student will continue to develop safety practices, diagnostics, and learn to correctly identify and use automotive engine service tools and equipment. Students will learn different engine designs, constructions, and component identification. Engine service, repair, removal and installation procedures are covered along with disassembly, inspection, recondition and assembly of the engine cylinder block and cylinder head assemblies. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course

BWE102 BUSINESS WRITING ESSENTIALS 26/22 2.0

The Business Writing Essentials course will teach students the skills required to write business memos, business letters, and technical reports and to do research when necessary. Students will prepare a resume that can be used throughout their program. Team and individual effort will be required for a student to be successful in this course. A formal oral presentation will be required. This course includes Mopar, Ford and Toyota training modules. The student can expect 16 hours of homework during this course

BR105 BRAKE SYSTEMS 38/58 4.0

During this course the student will be introduced to the basic concepts involved in the brake system. General safety practices, as well as safety procedures specific to brake systems, will be covered. The student will become familiar with how Pascal's law is used to increase force in a hydraulic system. The student will learn the fundamentals of design and operation and perform diagnosis, service and repair on the following systems: master cylinders, power assist units, hydraulic lines and valves, disc, drum, parking and antilock brakes, electrical and electronic brake components. The MSDS (Material Safety Data Sheets) are introduced during this course. During shop time, the student will be required to apply safety practices and procedures. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

AMA102 APPLIED MATH I 30/18 2.5

The Applied Mathematics course will refamiliarize the students with basic applied mathematics functions and concepts as they apply in the automotive field. The student will work on decimals, common fractions, ratios and proportions, and percentages as they apply to the automotive field. The math course will improve the student's ability to navigate through some complex formulas in this field and touch on a few elements of the automotive business This course includes Mopar, Ford and Toyota training modules. The student can expect 16 hours of homework during this course.

AT106 AUTOMATIC TRANSMISSIONS 38/58 4.0

In this course, the students will learn the fundamentals of design, operation, and construction of the automobile's automatic transmissions and transaxles, which uses a combination of a torque converter and a planetary gear system to change gear ratios automatically. The students will review and practice drive train theory and automatic transmissions and transaxle theories of operation prior to learning the following systems: hydraulic circuits and apply devices, power flow, planetary gears, shafts, torque converter, clutch engagement and the basic transmission and transaxle electrical/electronic components, sensors, and their respective computer-controlled circuits. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

AMA103 APPLIED MATH II 30/18 2.5

Prerequisite: AMA102

A continuation of The Applied Mathematics I course will continue to refamiliarize the students with basic applied mathematics functions and concepts as they apply in the automotive field. The student will work on decimals, common fractions, ratios and proportions, and percentages as they apply to the automotive field. The math course will improve the student's ability to navigate through some complex formulas in this field and touch on a few elements of the automotive business. This course includes Mopar, Ford and Toyota training modules. The student can expect 16 hours of homework during this course.

PT107 POWERTRAIN 38/58 4.0

This course introduces the student to the fundamentals of design, construction, and operation of the automotive powertrain systems which transmit the engine's power to the vehicle's drive wheels. The student will learn the safety procedures and the basic theories that directly relate to the powertrain system such as engine torque and torque multiplication. The student will also learn about the components of the powertrain system and their sub-systems. The principal operation of the following systems will also be covered: clutches, manual transmissions, transaxles, front drive axles, drive shafts, universal joints, differentials, and rear drive axles, advance four-wheel systems, transfer gear case as well as powertrain electrical and electronic systems. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

AC108 HVAC I 34/14 2.5

During the theory portion of Course AC 108 the students will be introduced to the automotive heating and air conditioning systems. The students will learn health and safety practices, the proper use and care of air conditioning tools and equipment, as well as the basic theories, rules and regulations that apply to automotive air conditioning systems. The students will learn the fundamental principles of temperature, pressures and the differences between sensible, latent, and specific heat values before they are taught the fundamentals of design, construction and operation of the air conditioning system, system components, compressors and clutches, case and duct systems, retrofit, system controls, engine cooling and comfort heating systems. This course includes Mopar, Ford and Toyota training modules The student can expect 16 hours of homework during this course.

AC109 HVAC II 26/22 2.5

Prerequisite: AC108

Continuation of course AC 109 the students will be introduced to the automotive heating and air conditioning systems. The students will learn the fundamental principles of temperature, pressures and the differences between sensible, latent, and specific heat values before they are taught the fundamentals of design, construction and operation of the air conditioning system, system components, compressors and clutches, case and duct systems, retrofit, system controls, engine cooling and comfort heating systems. This course includes Mopar, Ford and Toyota training modules. The student can expect 16 hours of homework during this course.

SAS110 STEERING & SUSPENSION 50/46 4.5

During this course the student will be introduced to the automotive suspension and steering systems. Automotive safety procedures, lift safety, and the use of precision steering and suspension measuring equipment, will be introduced. Basic theories such as static balance, dynamic balance, and compressibility will be taught followed by an introduction to the fundamentals of design and operation of the following systems: front suspension, rear suspension, wheel bearing, tires, wheels, shock absorbers, struts, steering columns, steering linkage mechanisms, power steering pumps, rack and pinion gears, computer-controlled suspension systems, frames and four-wheel alignment. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

LIGHT DUTY & EV/HYBRID - ELECTIVES

LDD200 LIGHT DUTY DIESEL FUEL & EMISSIONS SYSTEMS 50/46 4.5

The student will be introduced to the fundamentals of design, construction, and operation of the Dodge, GM, and Ford, diesel engine fuel injection, governors, and emission controls systems. Basic diesel engine theories and laws which govern the formulas concerning force, work, torque, and power will also be covered. During the shop/lab time, the student will apply the diesel shop and personal safety procedures and they will learn to correctly identify and use diesel engine fuel service tools and test equipment that are recommended to perform diagnosis, service, and repairs on mechanical and hydraulic diesel fuel injection, governors, fuel pumps, tanks, and emission

control systems. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

LDD201 LIGHT DUTY DIESEL ENGINES 26/22 2.0

This course will introduce the student to the fundamentals of design, construction, theory, and laws of physics involved with the operation of four (4) stroke cycle light duty diesel engines. The student will learn the principal operation and interaction of the major components of 4 stroke diesel engines, such as engine blocks, crankshafts, cylinder heads, and valve train components. The student will learn to perform diagnosis, service, and repairs on these same engine systems. The student will also be introduced to the fundamentals of design, construction, and operation of the diesel engine accessory systems, such as oil lubrication, cooling, fuel, intake, exhaust turbochargers, and superchargers. The student will perform diagnosis, service, and repairs on these same systems. This course includes Mopar, Ford and Toyota training modules. The student can expect 16 hours of homework during this course.

ADV202 ADVANCED DIAGNOSTICS / EV & HYBRID TECHNOLOGY 50/46 4.5

This course will introduce the student to the fundamental principles of the electric battery-operated Hybrid, Electric and Fuel-Cell Vehicles. Prior to the introduction of the theory and operation of the current Hybrid Vehicle Technology, the student will review the basic electrical systems that were formerly covered in course ES-102, Basic Electronics. The student will learn hybrid safety, hybrid benefits and the concepts and basic functions of the following Hybrid Systems: Series, Parallel, and Series Parallel, Mild and Assist. The power-driven operating procedures for the following auxiliary accessory systems: Battery System, Power Brakes, Power Steering, Light Circuits, Electronic Instrumentation, Indicator Lights, Warning Devices and Heating Ventilation and Air Conditioning System will also be discussed in detail. Hydrogen and Prototype Fuel Cell Electric Vehicles and other possible hybrid vehicles will also be discussed. This course includes Mopar, Ford and Toyota training modules. The students can expect 38 hours of homework during this course.

PERFORMANCE TUNING ELECTIVES

PT200 FORCED INDUCTION & ENGINE ENHANCEMENTS 50/46 4.5

This course will teach the student the terminology along with the special parts associated with high performance modified engine components designed to strengthen the motor. The student will also be introduced to the fundamentals of the three power adders: nitrous, superchargers, and turbochargers. The student will learn the operation and theory of wet and dry nitrous systems, as well as nitrous dos and don'ts, and centrifugal and root's type superchargers, selection and sizing, for both journal and ball bearing. This course includes Mopar, Ford and Toyota training modules. The student can expect 38 hours of homework during this course.

PT201 PERFORMANCE BRAKES & SUSPENSIONS 26/22 2.0

The student will also review to the basic concepts involved with the automobile's brake and suspension systems. The student will be taught the correct procedures needed to customize brake components specifically to produce the best results for a variety of different applications, such as road racing, drag racing and high-performance street cars. This course includes Mopar, Ford and Toyota training modules. The student can expect 16 hours of homework during this course.

PT202 ENGINE MANAGEMENT SYSTEMS 50/46 4.5

This course will introduce the student to the basic fundamentals and theory of how to select, install, and calibrate engine management systems, such as piggy-back and stand-alone systems. This course will focus on proper air/fuel ratios and timing maps, specifically for both low and wide-open throttle and will cover the actual "tuning" process. The student will be taught the different fuel and timing parameters for the three different power adders, and they will learn how to "make power" using correct air/fuel ratios and ignition timing. This course includes Chrysler modules. The student can expect 38 hours of homework during this course.

COMM200 HUMAN COMMUNICATIONS 26/22 2.0

Upon completion of this course, the student will be able to apply the basic principles of human communication at the work site; produce polished written and verbal communication; demonstrate proficiency in problem-solving and soft skills; participate in group discussions, group presentations, and individual presentations; and produce individual presentations using real-world practical applications.

IN203 CAREER DEVELOPMENT & INTERNSHIP 24/8/196 5.5

Upon completion of this course, students will be able to produce a resume, cover letter, reference list, and relevant documentation in alignment with their career field and personal background. Students will learn and apply techniques concerning the job search process, navigation of electronic and traditional employment applications, various forms of interviews, and follow-up correspondence. Students will utilize research methods in preparation for successful interviews, career mobility, and advancement.

The Internship Program will allow students to experience situations that occur during the daily operation of a working shop. Students will be able to apply the knowledge and skills they have learned in previous courses to the workplace environment. Students entering this program must have satisfactorily completed all previous courses of the Automotive Technology Program.Each student will be placed in an approved automotive repair, service, or maintenance facility without monetary compensation to continue his/her training alongside experienced automotive technicians. The Internship Coordinator will closely supervise each student's progress for a total of one-hundred eighty (180) hours. Supervision will consist of reviewing student evaluations and scheduled/unscheduled weekly extern site contact. Student evaluations will be completed by the extern site manager or supervisor on a weekly basis.

The Internship Program Coordinator will review the student's weekly evaluation as well as any extern site recommendations with each student individually. During the review, any deficiencies indicated will be addressed with the student. The student will work with the Internship Program Coordinator to establish an individual study program designed to address and correct the areas that need improvement. The students will follow their individual study program during the weekly classroom sessions until satisfactorily completed. This course includes Mopar, Ford and Toyota training modules. The student can expect 12 hours of homework during this course.

DIESEL MECHANICS

Available at 9624 Plaza Circle – Main Campus

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities in Diesel Mechanics

Diesel service technicians and mechanics inspect, repair, and overhaul buses, trucks, or any vehicle with diesel engine. Diesel service technicians and mechanics usually work in well-ventilated and sometimes noisy repair shops. Positions include diesel mechanic, diesel technician, transit mechanic, heavy equipment mechanic, diesel engine specialist, diesel powerplant mechanic and heavy truck technician. They occasionally repair vehicles on roadsides or at worksites. Most diesel technicians work full time, and overtime and evening shifts are common. Although most diesel service technicians and mechanics learn on the job after a high school education, employers are increasingly preferring applicants who have completed postsecondary training programs in diesel engine repair. In addition, industry certification may be important. The median annual wage for diesel service technicians and mechanics was $58,970 in May 2023. Employment of diesel service technicians and mechanics is projected to grow 3 percent from 2023 to 2033, about as fast as the average for all occupations. About 25,600 openings for diesel service technicians and mechanics are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	**Texas**
Labor Market Information Employment 2024	561
Projected Employment 2035	602
Average Hourly Wage 2024	$22.37
Average Openings per year	52
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

Daimler Trucks North America (DTNA) Get Ahead Program

Take real web-based factory training that is recognized by Freightliner® and Western Star® Truck Dealerships and Detroit™ Engine Distributors. WTC's partnership with DTNA and the DTNA service network offers advanced job opportunities for you. The fifty-five Daimler modules are a requirement of the program and accounts for 20% of the student's grade. It is a dealership-based program.

VOLVO-DATE program is a corporate training-based program.

DATE Program Eligibility
New students enrolling into the Diesel Technology Degree program. To be eligible to participate in the Volvo/Mack Truck DATE courses the student must meet the following criteria.

1. Have and maintain a 3.0 or higher cumulative GPA throughout the Diesel Degree Program.
2. Have and maintain a 97% or higher attendance rate throughout the Diesel Degree Program.
3. Submit a written application to attend the Volvo / Mack Truck DATE courses during ninth basic core course.
4. Pass the application interview during the tenth basic core course and be accepted.

NOTE: Students that fail to maintain the minimum 3.0 GPA and 97% attendance requirements after being accepted into the Volvo/Mack Truck DATE courses are subject to being removed from the Volvo / Mack Truck DATE courses. The student may be allowed to continue the Diesel Program by attending the alternative Diesel Technology courses.

ASE EDUCATION FOUNDATION ACCREDITED PROGRAM IN DIESEL MECHANIC

What does ASE Master Level Accredited In Diesel Mechanics Mean?
ASE Education Foundation Master Level Accredited in Automotive means that WTC's Automotive Technology program has been accredited by ASE Education Foundation. WTC completed an extensive evaluation and application process. Upon ASE Education Foundation review, an evaluation team conducted an on-site inspection of our campus to review the curriculum, teaching techniques, equipment and training aids, task sheets, tools, budget, and safety measures. WTC remains one of the few private career schools in the nation to be ASE Education Foundation Master LEVEL ACCREDITED in Automotive.

How Does a WTC Graduate Benefit from an ASE Education Foundation Master Level Accredited Program?
To become ASE Certified, a person must have two years' work experience and pass ASE certification examinations. A graduate of the school's ASE Master Level Accredited program can substitute the training for one year of work experience toward ASE's two-year work requirement. In addition, information covered in the curriculum helps to prepare students to take the ASE examinations.

Experienced Instructional Staff
Our instructors are required to have recent and sufficient field experience and training before joining the WTC team. They share insights with our students that might otherwise take years to learn. We continually update our instructors with seminars and workshops to keep them abreast of new technology. In turn, they pass this knowledge on to our students. All of WTC's automotive instructors are required to be ASE Certified. A large percentage of the instructional staff is Master Certified in all areas of the automobile.

ASE Education Foundation Master Level Accredited
WTC is one of the few private career schools in the nation to offer an automotive program that is Master Level

Accredited by the ASE Education Foundation.

- T2. Truck Diesel Engines T3. Truck Drive Train T4. Truck Brakes
- T5. Truck Suspension & Steering
- T6. Truck Electrical & Electronic Systems T7. Truck HVAC
- T8. Truck PM Truck Hydraulics

DIESEL MECHANICS COURSES
COURSES 1-17
1524 CLOCK HOURS
63.0 SEMESTER CREDIT HOURS

Educational Objectives
The objective of the Associate of Occupational Studies in Diesel Mechanics is to prepare the student for entry-level employment as a diesel technician with the basic knowledge and skills to diagnose malfunctions, perform preventative maintenance and make necessary repairs on the following systems: diesel engines, suspension and steering, air brakes, electrical/electronics, drive train, heating ventilation and air conditioning, and hydraulics.

The student who completes the program will be prepared to work as an entry-level diesel service technician in medium/heavy-duty dealerships, diesel repair facilities, service, and fleet maintenance facilities.

Notes: The sequential order of classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

Technical Standards and Essential Functions
Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program satisfactorily.

1. The ability to detect or tell the differences between sounds that vary in pitch and loudness.
2. The ability to decipher detail in short range (within a few feet from the observer).
3. The ability to sit for long periods of time.
4. The ability to stand for long periods of time.
5. Sufficient manual dexterity, strength, and steadiness.
6. The ability to climb steps.
7. Close-range vision and color differentiation.
8. Sufficient flexibility and to bend, stretch, twist, or reach with arms extended, and/or legs.
9. The ability to adjust the controls of a vehicle quickly and repeatedly to exact positions.
10. The ability to lift to 50 pounds.
11. The ability to use hand tools
12. Strong problem solving, communication and analytical skills.

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

DIESEL MECHANICS

#	Course Code For Volvo/ Mack	Volvo/ Mack Course Title	Course Code for Diesel Mechanics	Diesel Mechanics Course Title	Hrs	Theory/ Lab/Int	% On-Campus/ Online	Semester Credit Hours
1			FOU 101	Foundations	48	26/22	80/20	2.0
2			DT 101	Electrical	96	38/58	80/20	4.0
3			DT 103	Engines and	96	38/58	80/20	4.0

				Accessories				
4			BWE102	Business Writing Essentials	48	26/22	80/20	2.0
5			DT 104	Drive Trains/ Steering and Suspension	96	40/56	80/20	4.5
6			DT 105	Basic Brakes	48	18/30	80/20	2.0
7	VM 201	Vehicle Familiarization Computerized Navigation	DT 201	Preventive Maintenance	96	40/56	80/20	4.5
8	VM 202	VM HVAC	DT 202	HVAC	48	18/30	80/20	2.0
9	VM 203	V/M Advanced Electrical& Hydraulics	DT 203	Advanced Electrical& Hydraulics	96	40/56	80/20	4.5
10	VM 204	VM Engines	DT 204	Advanced Engines	48	18/30	80/20	2.0
11	VM 205	VM Advanced Drivetrain /Steering &Suspension	DT 205	Advanced Drivetrain /Steering & Suspension	96	40/56	80/20	4.5
12	VM 206	VM Advanced Brakes	DT 206	Advanced Brakes	48	18/30	80/20	2.0
13	VM 207	VM Diagnostics I & II	DT 207	Fuels and Emissions	96	40/56	80/20	4.5
14	VM 208	VM Aftertreatment	DT 208	Intro to Diagnostics	48	18/30	80/20	2.0
			AMD101	Applied Mathematics	96	68/28	80/20	5.0
15	VM 209	VM Diagnostics III	DT209	PC Based Diagnostics	48	18/30	80/20	2.0
			DTC 210 OR CDL 210	CDL or Welding	96	38/58	80/20	4.0
16			COMM 200	Human Communications	48	26/22	80/20	2.0
17			IN 203	Career Development & Internship	228	24/8/ 196	00/00	5.5
Total Hours and Credits - AOS Degree in Diesel Mechanics					**1524**	**592/736 /196**		**63.0**

* Commercial Driving is a non-Hybrid course

DIESEL MECHANICS COURSE DESCRIPTIONS

FOU101 FOUNDATIONS 26/22/2.0

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

DT101 ELECTRICAL 38/58 /4.0

This course introduces the student to the fundamental principles of the medium/heavy-duty diesel trucks basic electrical and electronic systems. The course covers the various types of electrical circuits and how they operate, as well as the theories and laws, which dictate electrical circuit behavior. The student will also learn the fundamentals of design, construction, and operation of electrical components, meters, wiring, circuit diagrams, conventional analog instrumentation, indicator lights, warning lights, electrical accessories, and direct current motors. The starting and charging systems will also be covered. The student can expect 38 hours of homework during this course. This course includes OEM training modules.

DT103 ENGINES AND ACCESSORIES 38/58/4.0

This course will introduce the student to the fundamentals of design, construction, theory, and laws of physics involved with the operation of four (4) stroke cycle diesel engines. The student will learn the principal operation and interaction of the major components of 2 and 4 stroke diesel engines, such as engine blocks, crankshafts, cylinder heads, and valve train components. The student will also be introduced to the fundamentals of design, construction, and operation of the diesel engine accessory systems, such as oil lubrication, cooling, fuel, intake, exhaust turbochargers, superchargers, and engine braking. The student will perform diagnosis, service, and repairs on these same systems. The student can expect 38 hours of homework during this course. This course includes OEM training modules.

BWE102 BUSINESS WRITING 26/22/2.0

The Business Writing Essentials course will teach students the skills required to write business memos, business letters, and technical reports and to do research when necessary. Students will prepare a resume that can be used throughout their program. Team and individual effort will be required for a student to be successful in this course. A formal oral presentation will be required. This course includes OEM training modules.

DT104 DRIVE TRAINS / STEERING & SUSPENSIONS 40/56/4.5

During this course, the student will be introduced to the fundamentals and theory of the medium/heavy drive trains and steering and suspension systems. This course will introduce the student to the operating principles of medium/heavy-duty truck drivetrain systems that include manual transmissions, clutches, drive shafts, universal joints and tires/rims. Basic theories such as engine torque multiplication and gear theory will be taught. The basic theory of the medium/heavy-duty truck front and rear suspensions systems will be discussed as well. The shop/lab work will consist of the student is applying the recommended shop and personal safety procedures, to read and interpret wiring diagrams correctly identifying and using the service tools and test equipment to perform diagnosis of on-board computer systems. The student can expect 38 hours of homework during this course. This course includes OEM training modules.

DT105 BASIC BRAKES 18/30/2.0

This course will introduce the student to the fundamentals of design, construction, operation, and theory of the medium/heavy-duty truck air and air/hydraulic brake systems and components, such as: master cylinder, power assist unit, disc drums, wheel bearings, air brake component and their related electrical/electronic subsystem. Trailer braking systems will also be covered. The student will perform diagnosis, and service on these same

systems. The student will learn how to use and interpret Material Safety Data Sheets (MSDS). The student can expect 16 hours of homework during this course. This course includes OEM training modules.

DT201 PREVENTATIVE MAINTENANCE 40/56/4.5

The student will learn how to correctly perform preventative maintenance procedures on all medium/heavy-duty truck systems, be taught the proper procedure to follow when preforming PM inspections, the required forms and state and federal regulations related to on highway vehicle maintenance and inspections. Students will learn basic shop safety practices. The student will perform preventative maintenance procedures on all medium/heavy-duty truck systems and add components, to include trailers and fifth wheels. The student will follow the proper procedure in preforming PM inspections with detailed inspections of the following systems: brakes, exterior lights, engine compartment, interior cabin, tires, and steering and suspension components. Students will learn basic shop management and organizational skills. Special emphasis will be placed on shop safety practices. Students will also participate in organization and workflow management while in a shop environment. The student can expect 38 hours of homework during this course. This course includes OEM training modules.

VM201

Volvo/Mack VEHICLE FAMILIARIZATION/COMPUTER NAVIGATION 40/56/4.5

This course introduces students to industry and OEM information based on Mack Trucks and Volvo Trucks, model identification, and product specific truck theory. During this course**,** the student will learn the history of Mack Trucks and Volvo Trucks. Students will learn how to correctly perform preventative maintenance procedures on Mack Trucks and Volvo Trucks, systems and components. Students will be taught the proper procedure to follow when inspecting Mack Trucks and Volvo Trucks. Students will gain knowledge and build skills in time management, warranty, safety, basic shop management and organizational skills. This course also introduces students to using basic computer skills needed to open the Mack and Volvo Truck Dealer Portals (TDP) to view OEM information based on model and vehicle identification number. Lab safety procedures, proper use of tools and demonstrate the ability to exercise time management and professionalism will be taught. The student can expect 38 hours of homework during this course. This course includes OEM factory training modules.

DT202 HVAC 18/30/2.0

During this course, the student will be introduced to the theory, design, construction, operating principles and diagnostics of the climate control system components: compressors, clutches, evaporator cores, air ducts and case, refrigerant flow, heater cores, electrical/ electronic temperature controls and their required subsystems. The student will learn the principles of temperature, pressures and the differences between sensible, latent, and specific heat values. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

VM202

Volvo/Mack V/M HVAC 18/30/2.0

In this course the student will be given instructions on Mack and Volvo HVAC component location and function during normal operation, how to locate and operate the cab and sleeper HVAC controls during the servicing procedure and how to service, troubleshoot and repair the vehicle's HVAC system for the cab and sleeper using a/c recovery/recycling equipment. The student will be given instruction on how to identify and explain the components of a Volvo D-series and/or Mack MP-series engine. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

DT203 ADVANCED ELECTRICAL & HYDRAULICS 40/56/4.5

Prerequisite: DT101

The student will review the basic electrical systems previously covered and then introduced to the design, construction, and theory of the medium/heavy truck onboard computer systems that include engine and body computers, input/output sensors, electronic instrumentation, electronic lighting, anti-theft, passive restraint,

electrical accessories, and electronic chassis controls. The shop/lab work will consist of the student is applying the recommended shop and personal safety procedures, and learning how to read and interpret wiring diagrams, and correctly identifying and using the service tools and test equipment required to perform service, and repairs on on-board computer systems. During this course, the student will also be introduced to the design, construction, theory and operation of the medium/heavy-duty truck mechanical and Hydraulic systems, to include hydraulic pumps, tanks, hoses, fittings, valves, and actuators. In addition, during this course the student can expect 38 hours of homework during this course. This course includes OEM training modules.

VM203
Volvo/Mack ADVANCED ELECTRICAL & HYDRAULICS 40/56/4.5
Prerequisite: DT101

In this course the student will review what electricity is and how it is used within the vehicle, the differences between voltage, amperage, and current and how they apply to Ohm's Law. Various circuit types including simple, series, parallel, and series-parallel circuits. Identifying proper volt drops and amperage draws for a starting and charging circuit. The student will also review how to read and interpret wiring schematics and identifying proper wiring and harness repairs on the vehicle. The student will learn how to identify Volvo Trucks specific and Mack Trucks Specific Engine Control Module configurations and the three-module design used by Volvo Trucks and Mack Trucks. The student will also learn how to determine the function of the sensors, controls, and actuators of Mack and Volvo Engine platforms. During this course, the student will be introduced to the design, construction, theory and operation of the medium/heavy-duty truck mechanical and Hydraulic systems, to include hydraulic pumps, tanks, hoses, fittings, valves, and actuators. Students will also participate in organization and workflow management while in a shop environment. The student can expect 38 hours of homework during this course. This course includes OEM factory training modules.

DT204 ADVANCED ENGINES 18/30/2.0
Prerequisite: DT103

In this course the student will be given instruction on identify and explain the components of a Diesel engine. Students will learn how to disassemble, inspect, and overhaul a diesel engine. Students will also learn the ability to properly identify parts failure and how to properly research parts needed to repair the engine to working order as needed. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

VM204
Volvo/Mack VOLVO/MACK ENGINES 18/30/2.0
Prerequisite: DT103

In this course the student will be given instruction on identify and explain the components of a Volvo D-series and/or Mack MP-series engine. Students will learn how to disassemble, inspect and overhaul a Volvo or Mack engine. Students will also learn the ability to properly identify parts failure and how to properly research parts needed to repair the engine to working order as needed. The student can expect 16 hours of homework during this course. This course includes OEM factory training modules.

DT205 ADVANCED DRIVETRAIN / STEERING & SUSPENSIONS 40/56/4.5
Prerequisite: DT104

The student will review basic drivetrains that was covered and will be introduced to advanced theory, design, construction, operating principles and diagnostics of medium/heavy-duty truck drivetrain systems that include manual transmissions, clutches, drive shafts, universal joints, semi-full floating drive axles, multi-wheel drive systems, power take off, air operated shifting, two speed and controlled traction differentials, and tires/rims. Students will review air/hydraulic principles and components operation, and the basic theories such as engine torque multiplication and gear theory will be taught.

During this course, the student will review basic steering and suspension systems. They will then be introduced to advanced design, construction, and theory of the medium/heavy-duty truck front and rear suspensions and brake

systems. Students will also perform diagnosis, service, and repairs on these same systems The student can expect 38 hours of homework during this course. This course includes OEM training modules.

VM205
Volvo/Mack ADVANCED DRIVETRAIN /STEERING & SUSPENSIONS 40/56/4.5
Prerequisite: DT104

In this course the student will be given instruction on Mack and Volvo specific drivetrain , steering and suspension systems The student will review basic drivetrains that was covered and will be introduced to advanced theory, design, construction, operating principles and diagnostics of medium/heavy-duty truck drivetrain systems that include manual transmissions, clutches, drive shafts, universal joints, semi-full floating drive axles, multi-wheel drive systems, power take off, air operated shifting, two speed and controlled traction differentials, and tires/rims. Students will review air/hydraulic principles and components operation, and the basic theories such as engine torque multiplication and gear theory will be taught. They will then be introduced to advanced design, construction, and theory of the medium/heavy-duty truck front and rear suspensions and brake systems. Students will also perform diagnosis, service, and repairs on these same systems The student can expect 38 hours of homework during this course. This course includes OEM training modules.

DT206 ADVANCED BRAKES 18/30/2.0
Prerequisite: DT105

During this course, the student will review Basic Brakes before they will be introduced to advanced theory, design, construction This course will introduce the student to advanced design, construction, operation, and theory of the medium/heavy-duty truck air and air/hydraulic brake systems and components, such as: master cylinder, power assist unit, disc drums, wheel bearings, air brake component and their related electrical/electronic subsystem. Trailer braking systems will also be covered. The student will perform diagnosis, service, and repairs on these same systems. The student can expect 16 hours of homework during this course This course includes OEM training modules.

VM206
VOLVO/MACK ADVANCED BRAKES 18/30/2.0
Prerequisite: DT105

In this course the student will be given instruction on Mack and Volvo specific Mechanical and electronic braking systems. The student will learn details about the air braking systems used on Mack Trucks and Volvo Trucks, how to service, troubleshoot, repair, and adjust as necessary the vehicle's brakes, and what type of ABS system is in use on an individual truck. Students will also learn how to test, repair or replace sensor and about the different inputs used by the ABS control to provide enhanced antilock braking and hoe to use handheld computer system for servicing and repairing the ABS system. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

DT207 FUEL & EMISSION SYSTEMS 40/56/4.5

The student will be introduced to the fundamentals of design, construction, and operation of the Detroit, International, Cummins, and Caterpillar diesel engine fuel injection, and governors. Additionally, the fundamentals of design, construction, and operation of EPA diesel fuel emission system requirements will be taught. Students will also be trained on Diesel Particulate Filter (DPF) systems. Student will learn how to identify catalyzed and non-catalyzed Diesel Particulate Filter systems, the components specific to catalyzed and non-catalyzed DPF systems, how to properly diagnose, repair and maintain DPF and be able to describe the process of regeneration and what chemical changes are occurring in the DPF unit. The regeneration and sublimation process for the diesel particulate filter (DPF) and the selective catalyst reduction (SCR) system, what environmental contamination is reduced, diesel exhaust fluid (DEF) and the proper handling procedures, how to service, diagnose and repair the vehicle emission systems.
Students can expect 38 hours of homework during this course. This course includes OEM training modules.

VM207
Volvo/Mack **ADVANCED DIAGNOSTICS I & II** **40/56/4.5**

In this course the student will be given instruction on general and advanced diagnostic troubleshooting practices, procedures, and techniques in a shop environment. Student will learn how to identify fault codes on a vehicle using Mack Trucks and Volvo Trucks proprietary diagnostic software, how to use TDP and PTT during troubleshooting procedures, how to identify HD-OBD and how it will be used in Mack Trucks and Volvo Trucks, J1939, and J1587/1708 data link systems as well as multiplexing, the use of oscilloscopes for electrical fault troubleshooting. In this course the student will be given a review on previously learned general and advanced diagnostic troubleshooting practices, procedures, and techniques, the student will also learn how to use the general diagnostics and advanced diagnostics in a shop environment, how to successfully identify fault codes on a vehicle using Mack Trucks and Volvo Trucks proprietary diagnostic software, and how to the use of TDP and PTT during troubleshooting procedures. The student will learn how to identify HD-OBD and how it will be used in Mack Trucks and Volvo Trucks, an understanding of the ISO, J1939, and J1587/1708 data link systems as well as multiplexing and detailed use of oscilloscope usage on injectors, cam and crank sensing timing, and data link troubleshooting. This course includes OEM training modules. The student can expect 38 hours of homework during this course.

DT208 **INTRODUCTION TO DIAGNOSTICS** **18/30/2.0**

During this course, the student will be introduced to the fundamentals and theory of the medium/heavy truck onboard computer systems and diagnostics. To include engine and body computers, input/output sensors, electronic instrumentation. The shop/lab work will consist of the student is applying the recommended shop and personal safety procedures, to read and interpret wiring diagrams correctly identifying and using the service tools and test equipment to perform diagnosis of on-board computer systems. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

VM208
Volvo/Mack **AFTER TREATMENTS & SCR SYSTEMS** **18/30/2.0**

In this course the student will be given instruction on Mack and Volvo specific steering and suspension systems. The student will also be given instruction on Mack and Volvo specific Diesel Particulate Filter (DPF) systems & Secondary Restraint Systems on Mack Trucks and Volvo Trucks will also be taught. Student will learn how to identify catalyzed and non-catalyzed Diesel Particulate Filter systems, the components specific to catalyzed and non-catalyzed DPF systems, how to properly diagnose, repair and maintain DPF and be able to describe the process of regeneration and what chemical changes are occurring in the DPF unit. Students will also diagnosis and repair Mack and Volvo Secondary Restraint Systems. Students will participate in organization and workflow management while in a shop environment. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

AMD101 **APPLIED MATHEMATICS** **68/28/5.0**

The Applied Mathematics & Precision Measurements course will refamiliarize the students with basic applied mathematics functions and concepts as they apply in the Heavy Truck field and the use of precision measurement tools. The student will work on decimals, common fractions, ratios and proportions, and percentages as they apply to the Heavy Truck field. The math course will improve the student's ability to navigate through some complex formulas in this field. This course includes OEM training modules.

DT209 **PC BASED DIAGNOSTIC** **18/30/2.0**

During this course, the student will review Basic Drivetrains that was covered in DTID 106 before they will be introduced to advanced design, construction, and theory of the medium/heavy truck onboard computer systems that include engine and body computers, input/output sensors, electronic instrumentation, electronic lighting, anti-theft, passive restraint, electrical accessories, and electronic chassis controls.
The shop/lab work will consist of the student is applying the recommended shop and personal safety procedures, and learning how to read and interpret wiring diagrams, and correctly identifying and using the service tools and

test equipment required to perform diagnosis, service, and repairs on on-board computer systems. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

VM209
Volvo/Mack VOLVO/MACK ADVANCED DIAGNOSTICS III 18/30/2.0
Prerequisite: VM207
In this course the student will be given an review on previously learned general and advanced diagnostic troubleshooting practices, procedures, and techniques, the student will also learn how to use the general diagnostics and advanced diagnostics in a shop environment, how to successfully identify fault codes on a vehicle using Mack Trucks and Volvo Trucks proprietary diagnostic software, and how to the use of TDP and PTT during troubleshooting procedures. The student will learn how to identify HD-OBD and how it will be used in Mack Trucks and Volvo Trucks, an understanding of the ISO, J1939, and J1587/1708 data link systems as well as multiplexing and detailed use of oscilloscope usage on injectors, cam and crank sensing timing, and data link troubleshooting. The student can expect 16 hours of homework during this course. This course includes OEM training modules.

CDL210
OR DTC210 COMMERCIAL DRIVING OR BASIC CUTTING & WELDING 38/58/4.0

OPTION #1- 96 HOURS COMMERCIAL DRIVER LICENSE – STATE OF TEXAS
CLASS B CDL TRAINING
The student will receive entry-level training in commercial vehicle operation and driving with classroom and behind-the-wheel instruction. This will include laws relating to intrastate commercial motor vehicle operations, pre-trip inspection, vehicles safety and operational equipment. Coupling and uncoupling
of combination units, placing the commercial motor vehicle in safe operation, the use of controls and emergency equipment. The student will be trained on inspection of mechanical components, defensive driving techniques, cargo loading, securing load, documentation, map reading, DOT logbooks, trip planning, accident and fire prevention, reporting, hazardous material transportation and documentation. The students will also be given demonstration and skill development of basic maneuvers of driving a combination vehicle. Driving proficiency development will include vehicle control, backing, visual search, shifting, turning, space and speed management, and hazard perception. Successful completion of this class should prepare the student to pass the Commercial Driver's License (CDL) skill examination.

Classroom and behind-the-wheel instruction will consist of: laws relating to either interstate and/or intrastate commercial motor vehicle operations; pre-trip inspection of commercial motor vehicles and both safety and operational equipment; coupling and uncoupling of combination units, if the commercial motor vehicle to be driven includes such units; placing the commercial motor vehicle in operation; use of the commercial motor vehicle's controls and emergency equipment; operation of the inner-city and interstate highway traffic and passing; turning, backing, and parking the commercial motor vehicle; braking and slowing the vehicle by means other than application of the brakes; and completing driver's daily log books. Students that select this option must meet all state and Federal requirements related to obtaining a **Class "B" CDL**.

*** Commercial Driver Training is a non-Hybrid course***

OPTION #2-96 HOURS BASIC CUTTING AND WELDING
During this course, the student will be taught how to set-up the oxyacetylene process for cutting and welding. The student will learn the basic techniques for basic fillet welds. Safety precautions will be strictly enforced. The shop/lab work will consist of the student applying the recommended shop and personal safety procedures, the student will practice metal cutting and horizontal welding.

COMM 200 HUMAN COMMUNICATIONS 26/22/2.0

Upon completion of this course, the student will be able to apply the basic principles of human communication at the work site; produce polished written and verbal communication; demonstrate proficiency in problem-solving and soft skills; participate in group discussions, group presentations, and individual presentations; and produce individual presentations using real-world practical applications.

IN 203 CAREER DEVELOPMENT & INTERNSHIP 24/8/196/5.5

Upon completion of this course, students will be able to produce a resume, cover letter, reference list, and relevant documentation in alignment with their career field and personal background. Students will learn and apply techniques concerning the job search process, navigation of electronic and traditional employment applications, various forms of interviews, and follow-up correspondence. Students will utilize research methods in preparation for successful interviews, career mobility, and advancement..

Each student will be placed in an approved diesel repair, service, or maintenance facility without monetary compensation to continue his/her training alongside experienced diesel technicians. The Internship Coordinator will closely supervise each student's progress for a total of one-hundred eighty (180) hours. Supervision will consist of reviewing student evaluations and scheduled/unscheduled weekly extern site contact. Student evaluations will be completed by the extern site manager or supervisor on a weekly basis.

The Internship Program Coordinator will review the student's weekly evaluation as well as any extern site recommendations with each student individually. During the review, any deficiencies indicated will be addressed with the student. The student will work with the Internship Program Coordinator to establish an individual study program designed to address and correct the areas that need improvement. The students will follow their individual study program during the weekly classroom sessions until satisfactorily completed. This course includes OEM training modules. The student can expect 16 hours of homework during this course

REFRIGERATION AND HVAC TECHNOLOGY

Available at 9624 Plaza Circle– Main Campus

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities in Refrigeration and HVAC Technology

Heating, air conditioning, and refrigeration mechanics and installers work on heating, ventilation, cooling, and refrigeration systems. These workers install and repair systems in homes, schools, hospitals, and other buildings. They may need to work in cramped spaces, outdoors, or in extreme temperatures. Career opportunities include refrigeration technician, air conditioning technician, installation technician, controls technician, indoor air quality expected, sheet metal worker, service technician, maintenance technician, and facilities technician. Most work full time, and schedules may vary. Once hired, they typically have a lengthy period of on-the-job training to attain competency. These workers may need a license or certification. The median annual wage for heating, air conditioning, and refrigeration mechanics and installers was $57,300 in May 2023. Employment is projected to grow 9 percent from 2023 to 2033, much faster than the average for all occupations. About 42,500 openings are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	**Texas**
Labor Market Information Employment 2024	2,819
Projected Employment 2035	4,804
Average Hourly Wage 2024	$21.16
Average Openings per year	287
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

REFRIGERATION AND HVAC TECHNOLOGY
COURSES 1-28
1488 CLOCK HOURS
60.0 SEMESTER CREDIT HOURS

Educational Objectives

The Associate of Occupational Studies Degree in Refrigeration and HVAC Technology teaches students foundational skills in refrigeration, electricity, air conditioning, and sheet metal work. The program also covers commercial systems, motor controls, and energy-efficient technologies like building automation and controls. Graduates are prepared for entry-level roles as technicians or sheet metal workers, with opportunities for rapid advancement due to their expertise in high-efficiency systems and sustainable energy practices.

Certifications

- Environmental Protection Agency (EPA)-608
- R-410 Refrigerant Safety Certification
- HVAC Excellence Electrical Assessment Exam

Note: Students must pass a background check to be eligible for registration with the Texas Department of Licensing & Regulation (TDLR). Upon completion of curriculum prior to entering internship, students will be registered with the Texas Department of Licensing and Regulations. This step is required to ensure compliance with state laws governing licensed professions such as HVACR technicians.

Technical Standards and Essential Functions

Students entering this program must meet certain physical and sensory standards, with or without reasonable accommodation, to successfully complete the program. These essential functions are crucial for the demands of the HVACR field. They include:

1. Close-range vision and color differentiation.
2. Flexibility for bending, stretching, and reaching.
3. Sufficient manual dexterity, strength, and steadiness.
4. Ability to grasp and manipulate small objects.
5. Physical endurance for standing, sitting, or squatting over time.
6. Lifting up to 50 lbs.
7. Climbing ladders.
8. Comfortable working at elevated heights, such as rooftops or platforms.
9. The ability to use hand tools
10. Strong problem solving, communication and analytical skills.

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

REFRIGERATION AND HVAC TECHNOLOGY

#	Course Number	Course Title	Hrs.	Theory/ Lab/Int	% On-Campus/ Online	Semester Credit Hours
1	FOU 101	Foundations	48	26/22	80/20	2
2	TF-101	Technical Fundamentals	48	32/16	80/20	2.5
3	TF-102	Technical Fundamentals Lab	48	0/48	100/0	1.5
4	AM-101	Applied Math I	48	32/16	80/20	2.5
*5	EL-102	Basic Electricity	48	32/16	80/20	2.5
*6	EL-103	Basic Electricity Lab	48	0/48	100/0	1.5
*7	AM-102	Applied Math II	48	32/16	80/20	2.5
8	FR-103	Fundamentals of Refrigeration	48	32/16	80/20	2.5
9	FR-104	Fundamentals of Refrigeration Lab	48	0/48	100/0	1.5
10	GS-105	General Sheet Metal	48	16/32	80/20	2
11	AC-106	Air Conditioning	48	32/16	80/20	2.5
12	AC-107	Air Conditioning Lab	48	0/48	100/0	1.5
13	HS-109	Heating Systems	48	32/16	80/20	2.5
14	HS-110	Heating Systems Lab	48	0/48	100/0	1.5
15	RM-207	Refrigerant Management	48	32/16	80/20	2
16	ACC-201	Commercial Air Conditioning	48	32/16	80/20	2.5

17	ACC-202	Commercial Air Conditioning Lab	48	0/48	100/0	1.5
18	CON-201	Energy Management and Controls	48	32/16	80/20	2
*19	RC-203	Commercial Refrigeration	48	32/16	80/20	2.5
*20	RC-204	Commercial Refrigeration Lab	48	0/48	100/0	1.5
*21	IM-204	Ice Machines	48	16/32	80/20	2
*22	HEM-206	Electric Motors and Controls	48	32/16	80/20	2.5
23	HEM-207	Electric Motors and Controls Lab	48	0/48	100/0	1.5
24	BWE-104	Business Writing Essentials	48	16/32	80/20	2
*25	HDI-209	Diagnostics and Installation Procedures	48	32/16	80/20	2.5
*26	HDI-210	Diagnostics and Installation Procedures Lab	48	0/48	100/0	1.5
27	HUCOMM	Human Communication	48	16/32	80/20	2
*28	HIN-209	Career Development/Internship	192	24/8/160	00/00	5
Total Hours- AOS Degree in Refrigeration and HVAC Technology			**1488**	**530/798/160**		**60.0**

REFRIGERATION AND HVAC TECHNOLOGY COURSE DESCRIPTIONS

FOU 101 FOUNDATIONS 26/22/2.0

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

TF 101 TECHNICAL FUNDAMENTALS 32/16/2.5

During this first course students will be oriented in their career field. Students will cover basic tools use in the industry, they will cover basic safety procedures, and cover a ladder safety written exam. Students will learn the science behind the industry such as the laws of Thermodynamics and heat transfer, Boyle's Law, Charles' Law, and Dalton's Law.

TF 102 TECHNICAL FUNDAMENTALS LAB 0/48/1.5

This course is the lab portion of TF-101 Technical Fundamentals. During this course students will be required to perform the following competencies, utilize Learning Resource Center, Swage and flare copper and aluminum tubing, Braze copper to copper, aluminum to aluminum, copper to steel, and steel to steel. Student will read and interpret special tools: manifold gauges, volt, Ohm, and amp meters.

AM 101 APPLIED MATHEMATICS I 32/16/2.5

The Applied Mathematics course will re-familiarize the student with basic applied mathematics functions and concepts as they apply to Refrigeration and HVAC Technology. work on decimals, common fractions, ratios and proportions, and percentages as they apply to the HVAC field.

EL 102 BASIC ELECTRICITY 32/16/2.5

In this course, students will learn the basics of electricity. Students will start with the movement of electrons, conductors, insulators, direct and alternating current, and electrical units of measurement. Also included is a description of the electrical circuit, making electrical measurements, Ohm's law, series and parallel circuits,

electrical power, magnetic fields, inductance, transformers, capacitance, impedance, sine waves, and using electrical measuring instruments. The course also covers wire sizes, circuit protection devices, and semiconductors or solid- state components. **PREQUISITE: TF-101, TF-102**

EL 103 BASIC ELECTRICITY LAB 0/48/1.5
This course is the lab portion of EL-102 Basic Electricity. In this course the students will be required to perform the following competencies: Identify and name basic components in an electrical circuit, wire basic series circuit and basic parallel circuits, read, and interpret pictorial and schematic diagrams. **PREREQUISITE: TF-101, TF-102**

AM 102 APPLIED MATHEMATICS II 32/16/2.5
The Applied Mathematics course will become more complex and improve the student's ability to navigate through complex formulas in this field and touch on a few other Refrigeration, Heating, Ventilation, and Air Conditioning business.

FR 103 FUNDAMENTALS OF REFRIGERATION 32/16/2.5
This course will cover the basic refrigeration cycle and the four basic components of the refrigeration system. The refrigeration cycle is the basis of all refrigerating equipment and an integral part of the program. The different types of compressors, condensers, evaporators, and metering devices will also be covered. **PREREQUISITE: EL-102, EL-103**

FR 104 FUNDAMENTALS OF REFRIGERATION LAB 0/48/1.5
Students will perform lab projects on refrigeration trainers and be able identify components and observe the refrigeration cycle. Upon completion of this course, be able to understand and identify the basic components in the refrigeration cycle. Student will also diagnose and repair a domestic refrigerator. **PREREQUISITE: EL-102, EL-103**

GS 105 GENERAL SHEET METAL 16/32/2.0
Upon the completion of this course, have students should have acquired the knowledge to fabricate and install both residential and commercial sheet metal ducting systems. Sheet metal fabrication will give the student the ability to produce the basic requirements needed in the sheet metal industry. The proper use of tools and safe handling of sheet metal will be emphasized.

AC 106 AIR CONDITIONING 32/16/2.5
The refrigeration cycle as applied to air conditioning will be covered. Students will be able to define comfort and understand basic Psychrometric chart. The design and theory of operation of air conditioning systems including direct expansion evaporators, sensors and dehumidification will be explained. Practical work experience consisting of general servicing, component replacement, schematic drawing and troubleshooting of conventional and computer-controlled air conditioners will also be included. **PREREQUISITE: FR-103, FR-104**

AC 107 AIR CONDITIONING LAB 0/48/1.5
This is the lab portion of AC-106. Students will be required to perform the following competencies: Identify components on split air conditioning system, packaged air conditioning system, properly connect refrigeration gauges on air conditioning systems, check system pressures and temperatures and use and understand the purpose of a sling psychrometer and digital psychrometer. **PREREQUISITE: FR-103, FR-104**

HS 109 HEATING SYSTEMS 32/16/2.5
In this course students will be taught various types of heating systems in use today. Installation and repair techniques will be discussed and demonstrated with emphasis on gas-fired, electric systems. Students will learn about safety consideration when working with gas furnaces. Electric heating and hydronic heating will also be covered. **PREREQUISITE: EL-102, EL-103**

HS 110 HEATING SYSTEMS LAB 0/48/1.5
This course is the lab portion of HS-109. Students will be required to perform the following competencies:

Cut and thread black pipe, adjust gas valve pressure, perform a CO check, adjust a thermostat heat anticipator, and troubleshoot standing pilot and high efficiency furnaces. **PREREQUISITE: EL-102, EL-103.**

RM 207 REFRIGERANT MANAGEMENT 32/16/2.0

According to Section 608 of the Clean Air Act of 1990, the Environmental Protection Agency (EPA), has made it a requirement that persons servicing or disposing of air-conditioning and refrigeration equipment be certified. It also limits the sale of refrigerants to certified technicians. Student will also review safety procedures and proper operating conditions of R-410A refrigerant. Students will take the R-410A safety certification exam. During this course students will learn the regulations, techniques and equipment necessary to pass the certification exams. **PREREQUISITE: FR-102, FR-103**

ACC 201 COMMERCIAL AIR CONDITIONING 32/16/2.5

This course will cover commercial air conditioning systems including high pressure, low pressure, and absorption chilled water systems. Students will also cover cooling towers, pumps, commercial package units, variable refrigerant flow, and variable air volume systems. **PREREQUISITE: AC-106, AC-107.**

ACC 202 COMMERCIAL AIR CONDITIONING LAB 0/48/1.5

This course is the lab portion of ACC-201. The students will be required to perform the following competencies: Identify major components of a chilled water system, explain the proper operation, maintenance, and troubleshooting procedures of chilled water systems and perform sta1t-up and troubleshoot a scroll chilled water system. **PREREQUISITE: AC-106, AC-107**

RC 203 COMMERCIAL REFRIGERATION 32/16/2.5

In this course students will cover commercial refrigeration systems including single compressor and parallel compressor, or supermarket rack systems. The design and theory of operation of reach-in, walk-in freezers, and coolers will be taught. An in-depth study of controls to regulate commercial systems completes this stage. **PREREQUISITE: FR-103, FR-104**

RC 204 COMMERCIAL REFRIGERATION LAB 0/48/1.5

This course is the lab portion RC-203. Students will be required to perform the following competencies: Define and measure superheat, sub-cooling, and compressor efficiency, pump down a refrigeration system and perform component removal, diagnose, set, and install pressure devices and defrost timeclocks. **PREREQUISITE: FR-103, FR-104**

IM 204 ICE MACHINES 16/32/2.0

This course will provide the student with the general knowledge to diagnose and repair ice machines. Installation and service procedures will be presented and discussed. Proper piping practices will be taught that will enable the student to properly install a remote condenser icemaker Practical work will consist of diagnosing electrical circuits, refrigerant charge, water circuit and other malfunctions to ice makers. Commercial types of ice makers commonly found in the industry will contain electromechanical as well as electronic controls. **PREREQUISITE:FR-103, FR-104**

HEM 206 ELECTRIC MOTORS AND CONTROLS 32/16/2.5

This course teaches the theory, operation, installation and maintenance of electric motors and electric motor controllers. Three phase compressors and three phase starting circuits. Students will learn about and train on variable frequency drive trainers where they will learn to program and troubleshoot VFD' s. Practical work projects will include various motors, controls, and control panels. **PREREQUISITE: EL-102, EL-103**

HEM 207 ELECTRIC MOTORS AND CONTROLS LAB 0/48/1.5

This course is the lab portion of HEM-206. Students will be required to perform the following competencies: Wire stop-start switches with line voltage controls, install and operate 120 volt on-delay timer with motor control, wire sequence controls, identify and wire three-phase wye and delta motor circuit connections and program and troubleshoot Variable Frequency Drive's. **PREREQUISITE: EL-102, EL-103**

CON 201 ENERGY MANAGEMENT AND CONTROLS 32/16/2.0

In this course students will become familiar, with the help of our two custom building automation/energy management trainers, how technology can be combined with our HVAC systems. Building automation is the use of automation and control systems to monitor and control building wide system such as, HVAC, lighting, alarms, and security access and cameras. Converging these systems into a single IT-managed network infrastructure creates a smart building that is also able to conserve energy. By utilizing this type of technology, a technician is able to begin the troubleshooting process without having to be next to the unit itself as well as able to set parameters for the unit to follow in order to save energy by utilizing VFDs.

BWE 104 BUSINESS WRITING ESSENTIALS 16/32/2.0

The Business Writing Essentials course will teach students the skills required to write business memos, business letters, and technical reports and to do research when necessary. Students will prepare a resume that can be used throughout their program. Team and individual effort will be required for a student to be successful in this course. A formal oral presentation will be required.

HDI 209 DIAGNOSTICS AND INSTALLATION PROCEDURES 32/16/2.5

This course introduces the student to the latest and most accurate diagnostic procedures used in the field as it applies to electrical, mechanical, and air flow problems. The course will cover low, medium, and high temperature systems used in heating, ventilation, air conditioning, and refrigeration industry. Electrical diagrams will be shown, and pressure temperature relationships will be explained. **PREREQUISITE: RC-203, RC-204**

HDI 210 DIAGNOSTICS AND INSTALLATION PROCEDURES LAB 0/48/1.5

This course is the lab portion of HDI-210. Students will be required to perform the following competencies, which include demonstrating proper leak testing, vacuum, and charging methods, measure and adjust superheat and sub-cooling, demonstrate proper field wiring, and demonstrate mechanical techniques on a variety of equipment. P**REREQUISITES: RC-203, RC-204**

HUCOMM HUMAN COMMUNICATION 16/32/2.0

The Human Communication course serves to introduce the student to basic principles of human communication and apply those principles of effectively communication in the work environment. This course is designed to develop the students written and verbal communication. This course is designed to address the need employers have for skilled employees who are proficient at problem-solving and developing their soft skills and will be required to participate in group discussion, group presentations, and individual presentations, and individual presentation on real-world practical applications.

HIN 209 CAREER DEVELOPMENT/INTERNSHIP 24/8/160/5.0

Upon completion of this course, students will be able to produce a resume, cover letter, reference list, and relevant documentation in alignment with their career field and personal background. Students will learn and apply techniques concerning the job search process, navigation of electronic and traditional employment applications, various forms of interviews, and follow-up correspondence. Students will utilize research methods in preparation for successful interviews, career mobility, and advancement.

The internship program allows the student to experience situations which occur during the daily operation of a working shop as students are placed with a local employer and apply the knowledge and skills learned in the classroom and shop/lab. Participation in the internship program requires that the student satisfactorily completes all previous program courses. Students will be placed in an approved HVAC/R repair, service, or maintenance facility without monetary compensation. The internship coordinator will supervise each student's progress during the 176-clock hour internship. Supervision consists of weekly student evaluations and scheduled/unscheduled weekly site visits. A weekly evaluation will be completed by the intern site manager. Students will be required to attend school one day per week for a classroom session during the internship experience for a total of 32 classroom hours. During this class period the intern coordinator will review the student's weekly evaluation as well as any recommendations made by the site manager or coordinator. Time will be taken to review any deficiencies suited by the site manager. A study program will be established by the extern coordinator and progress will be monitored each week during the class session.

ASSOCIATE OF APPLIED SCIENCE DEGREES

AEROSPACE AND DEFENSE TECHNOLOGY

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Career Opportunities in Aerospace and Defense Technology

Aerospace engineering and operations technologists and technicians run and maintain equipment used to develop, test, produce, and sustain aircraft and spacecraft. Aerospace engineering and operations technologists and technicians usually work in manufacturing plants, laboratories, and offices. Positions include aerospace products and parts manufacturing technician, bench technician, fiber optic technician, quality technician, repair technician, and test technician. Most work full time. Aerospace engineering and operations technologists and technicians typically need an associate's degree in engineering technology or a related field. Some employers consider candidates who have a high school diploma or have completed a certificate program. The median annual wage for aerospace engineering and operations technologists and technicians was $79,830 in May 2024. Employment of aerospace engineering and operations technologists and technicians is projected to grow 8 percent from 2023 to 2033, faster than the average for all occupations. About 1,100 openings for aerospace engineering and operations technologists and technicians are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024-2035 Projections)	**Texas**
Labor Market Information Employment 2024	907
Projected Employment 2035	1907
Average Hourly Wage 2024	$33.14
Average Openings per year	103
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

AEROSPACE AND DEFENSE TECHNOLOGY
COURSES 1-22
1680 CLOCK HOURS
70.0 SEMESTER CREDIT HOURS

Educational Objectives

Students gain a solid understanding of engineering principles, including mathematics and electronics and specific areas like aerodynamics, propulsion, structures, flight characteristics, hydraulics, and control systems. Aerospace Technicians learn to identify, formulate, and solve complex engineering problems, often involving design, analysis, testing and repair of aerospace systems and components. Students are instilled with a sense of professional ethics, including the importance of safety, reliability, and responsible innovation in the aerospace industry.

Certifications

The experience gained from this program will prepare the student for the following professional certification examinations: The ISCET Associate Level Certified Electronics Technician (CET) certification; the Certified Fiber Optics Technician certification through FOA; IPC certifications in Soldering (J-STD-001) and Wire Harnesses (WHMA-A-620C); OSHA 30-hour industrial certification, and NCATT Aircraft Electronics Technician. **Note:** WTC offers certification testing to its aerospace and defense technology graduates**.**

Technical Standards and Essential Functions

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program.

1. Must be able to see details at close range (within a few feet of the observer)
2. Must be able to match or detect differences between colors, including shades of color and brightness.
3. Must possess sufficient manual dexterity and steadiness.
4. Must be able to perform physical activities that require considerable use of your arms and legs and move the whole body.
5. Must be able to operate computers and computer systems (including hardware and software) to program, set up functions, enter data, or process information.
6. Must possess the ability to utilize computers and perform basic computer functions with programs in the Microsoft Suite, Word, Outlook, and Excel.
7. The ability to use hand tools
8. Strong problem solving, communication and analytical skills.

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

AEROSPACE AND DEFENSE TECHNOLOGY

#	Course	Title	Hrs.	Theory/Lab/ Int	% On-Campus/ Online	Semester Credit Hours
1	FOU 101	Foundations	48	26/22	80/20	2.0
2	ITSC 1401	Computer Applications	96	10/86	80/20	3.5
3	ENGL 1301	English Composition (Gen Ed)	48	48/0	0/100	3.0
4	ITSC 1411	Computer Technology	96	10/86	80/20	3.5
*5	MATH 1314	College Algebra (Gen Ed)	48	48/0	80/20	3.0
*6	PHYS 1401	College Physics I (Gen Ed)	96	32/64	80/20	4.0
7	ETIC 1220	Industrial Safety and Quality	48	16/32	80/20	2.0
*8	CETT 1401	Electronic Circuits I	96	32/64	80/20	4.0
9	SCOM 1315	Fundamentals of Human Communications (Gen Ed)	48	48/0	0/100	3.0
*10	CETT 1402	Electronic Circuits II	96	32/64	80/20	4.0

11	LOTT 2201	Introduction to Fiber Optics	48	16/32	80/20	2.0
*12	CETT 1425	Digital Fundamentals	96	32/64	80/20	4.0
13	CETT 1204	High Reliability Soldering	48	16/32	80/20	2.0
*14	AERO 2201	Introduction to Aerospace	48	16/32	80/20	2.0
15	AERO 2435	Materials and Processes	96	32/64	80/20	4.0
*16	AERO 2440	Aerospace Electronic Systems	96	32/64	80/20	4.0
17	CETT 2205	Cable and Wire Harness Assemblies	48	16/32	80/20	2.0
*18	AERO 2450	Aerospace Systems	96	32/64	80/20	4.0
19	PSYC 2301	General Psychology (Gen Ed)	48	48/0	0/100	3.0
20	EECT 2439	Communication Circuits	96	32/64	80/20	4.0
*21	AERO 2255	Aerospace Test and Measurements	48	16/32	80/20	2.0
22	CDVI2201	Career Development/Internship	192	24/8/160	100/00	5.0
Total Hours and Credits – AAS in Aerospace and Defense Technology			**1680**	**614/906/160**		**70.0**

NOTE: ***Courses flagged as (Gen Ed) are described in the General Education Courses section of this Catalog.***

AEROSPACE AND DEFENSE TECHNOLOGY COURSE DESCRIPTIONS

FOU 101 FOUNDATIONS 26/22/2.0

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

ITSC 1401 COMPUTER APPLICATIONS
10/86/3.5

Introduces the basic features of Microsoft Office, Windows basics, and file management. Students will develop familiarity with Word, Excel, PowerPoint, email, and Internet basics.

ITSC 1411 COMPUTER TECHNOLOGY 10/86/3.5

This course introduces basic computer hardware, operating software, and networks. It covers installing, upgrading, configuring, troubleshooting, and preventive maintenance of computers and networks with additional elements of soft skills and security.

ETIC 1220 INDUSTRIAL SAFETY AND QUALITY 16/32/2.0

This course covers identification of hazards, personal protective equipment, safe practices, and protection of personnel, property, and equipment in the industrial environment. Safety procedures, including OSHA regulations and hazardous materials handling, are also covered. Includes hands-on approach to the identification, use and care of tools and equipment used in industrial systems.

CETT 1401 ELECTRONIC CIRCUITS I 32/64/4.0

The course introduces the basic concepts and theory of electricity and magnetism with an emphasis on passive electrical elements such as resistors, capacitors, and inductors (RCL) and their applications in alternating current (AC) or direct current (DC) circuits. Students also learn how to build, test, and analyze simple RCL circuits in the laboratory, and use simulation software and test equipment such as power supply, multimeter,

signal/function generator, and oscilloscope. Related mathematics and physics concepts are developed alongside these concepts of electrical engineering**. PHYS 1401 College Physics is a prerequisite.**

CETT 1402 ELECTRONIC CIRCUITS II 32/64/4.0

The course introduces the basic concepts and theory of electronic solid-state devices with an emphasis on active electrical elements such as diodes, transistors and integrated circuits, and their applications in AC and DC circuits. Students also learn how to build, test, and analyze simple solid-state circuits in the laboratory, and use simulation software and test equipment such as power supply, multimeter, signal/function generator, and oscilloscope. Related mathematics and physics concepts are developed alongside these concepts of electrical engineering. **CETT 1401 Circuits I is a prerequisite.**

CETT 1425 DIGITAL FUNDAMENTALS 32/64/4.0

This course is an entry level course in digital electronics to include numbering systems, logic gates, Boolean algebra, and combinational logic. Different types of circuits such as of flip-flops, shift registers, adders, display decoders, multiplexers and demultiplexers, semiconductor memories, and other digital devices. The student is also introduced to troubleshooting techniques. Laboratory exercises during this course will provide the student practical experience to reinforce the theory. **CETT 1402 Circuits II is a prerequisite.**

CETT 1204 HIGH RELIABILITY SOLDERING 16/32/2.0

An explanation of the automated and hand soldering processes plus J STD-001 Hand soldering training including an understanding of the JSTD- 001 criteria for acceptable solder connections as well as component preparation, hand soldering, repair, packaging, inspection, ESD control, and process control with hands on experience and critique for assembly and hand soldering of wires and terminals, through-hole components and surface mount components. Upon successful completion of the course be certified by IPC in J-STD-001.

AERO 2201 INTRODUCTION TO AEROSPACE 16/32/2.0

Students are introduced to different types of aerospace systems and terminology and fundamental concepts of aircraft, spacecraft, and missile technologies through integrated lectures and laboratory sessions. The course presents introductory system-level concepts of fixed-wing and rotary-wing aircraft, space launch vehicles, spacecraft/satellite, and missiles.

AERO 2435 MATERIALS AND PROCESSES 32/64/4.0

This course covers the physical properties and characteristics of common materials, commodities and non-metallic materials used in the aerospace industry. Materials compatibility, basic metallurgy, treatment processes, adhesives, coatings, sealing, and issues with delamination, and faulty bonds.

AERO 2440 AEROSPACE ELECTRONIC SYSTEMS 32/64/4.0

The students are introduced to different basic control circuits using sensors, transmitters, transducers, and strain gauges. Students should be able to describe and define performance criteria for sensors and predict and analyze performance for different transducers and sensors. CETT 1402 Circuits II is a prerequisite.

LOTT 2201 INTRODUCTION TO FIBER OPTICS 16/32/2.0

An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors. This course will introduce the students to the origins of fiber optics. Fiber optic components, installation, testing, and safety will be the primary focus of this block of instruction. learn the types and specifications of various cables and hot to choose the proper cable for a project. Fiber optic media to Ethernet signal converts mane by 3M Communication Markets Division will be employed in various networking labs. Reinforcing the necessity to integrate fiber optic cabling and signal conversion. Cable color coding, terminations, testing, and inspection will be covered in detail. The Fiber Optics Association Certification and 3M Certification, Fusion Splice Certification will be presented to the student upon successful completion of this course. Upon successful completion of the course be certified by FOA as a CFOT.

AERO 2450 AEROSPACE SYSTEMS 32/64/4.0

This course introduces hydraulic, pneumatic, electrical, propulsion systems, mechanical, and familiarization of fluid system components, characteristics, and applications.

CETT 2205 CABLE AND WIRE HARNESS ASSEMBLIES 1 6/32/2.0

Students will be introduced to materials, methods, tests, and acceptability criteria for producing crimped, mechanically secured, or soldered interconnections and the related assembly activities associated with cable and harness assemblies. The intent is to rely on process control methodology to ensure consistent quality levels during the manufacture of products. Upon successful completion of the course be certified by IPC in IPC/WHMA-A-620C

EECT2439 COMMUNICATION CIRCUTS 32/64/4.0

This course covers communications circuits and principles including amplitude, frequency, and phase modulation, transmitters, receiver, transmission lines, antennas, and wave propagation. This course will include an introduction to Microwave, Satellite, Cellular, cable-based communication systems, cellular telephones, WI-FI and Bluetooth technologies. **CETT 1402 Circuits II and AERO 2440 Aerospace Electronics Systems Are a prerequisite.**

AERO 2255 AEROSPACE TEST AND MEASUREMENTS 16/32/2.0

This course covers electrical and mechanical testing procedures, equipment, measurements, and instrumentation involved in aerospace systems. Verification of tool and equipment calibration is also covered.

CDVI 2201 CAREER DEVELOPMENT/INTERNSHIP
24/8/160/5.0

Upon completion of the career portion of this course students will be able to produce a resume, a cover letter, and a reference list; complete a job application; do research on businesses as part of an exercise or a job search; sit for an interview with an expert in their field; and describe sources provided in the Learning Resource Center.

Upon completion of the internship portion students will be able to integrate the knowledge and skills learned in the program; work under the direction and supervision of business owners, managers, supervisors, or industry experts; maintain ethical and professional work standards while applying classroom learning; and demonstrate in a workplace environment the technical skills acquired throughout the program.

ELECTRONICS ENGINEERING TECHNOLOGY

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Career Opportunities in Electronics Engineering Technology

Electronics engineering technologists and technicians help engineers design and develop equipment that is powered by electricity or electric current. They work on teams with engineers and may work in offices, laboratories, or factories. Career opportunities include electronic engineering technician, manufacturing technician, automation technician, test technician, electronics repair technician, bench technician, utilities electronic technician, fiber optic technician and repair technician. Most work full time. Electronics engineering technologists and technicians typically need an associate's degree. The median annual wage for electrical and electronic engineering technologists and technicians was $72,800 in May 2023. Employment of electrical and electronic engineering technologists and technicians is projected to grow 3 percent from 2023 to 2033, about as fast as the average for all occupations. About 9,500 openings for electrical and electronic engineering technologists and technicians are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 through 2035 Projections)	**Texas**
Labor Market Information Employment 2024	907
Projected Employment 2035	1,097
Average Hourly Wage 2024	$30.05
Average Openings per year	103
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

ELECTRONICS ENGINEERING TECHNOLOGY
COURSES 1-21
1536 CLOCK HOURS
64.0 SEMESTER CREDIT HOURS

Educational Objectives

Graduates of this program will gain valuable knowledge in DC/AC circuits, solid state circuits, digital circuits, PLCs, industrial electronics, basic robotic operation, pneumatics, fiber, and soldering. Graduates will also gain valuable hands-on experience in a diverse set of technical areas.

Certifications

The experience gained from this program will prepare the student for the following professional certification examinations: the ISCET Associate Level Certified Electronics Technician (CET) certification; the Certified Fiber Optics Technician certification through FOA; and IPC certifications in Soldering (J-STD-OOI) and Wire Harnesses (WHMA-A-620C); OSHA 30-hour industrial certification and Industrial Journeyman certification.

Technical Standards and Essential Functions

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodation to be successful in completing this program.

1. Must be able to see details at close range (within a few feet of the observer)
2. Must be able to match or detect differences between colors, including shades of color and brightness.
3. Must possess sufficient finger dexterity and steadiness to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble objects
4. Must possess sufficient manual dexterity and steadiness to quickly move the hand, the hand together with the arm, or two hands to grasp, manipulate, or assemble objects
5. Must be able to perform physical activities that require considerable use of your arms and legs moving your whole body, such as climbing, lifting, balancing, walking, stopping, and handling of materials
6. Must be able to operate computers and computer systems (including I-adware and software) to program, setup functions, enter data, or process information
7. Must possess the ability to utilize computers and perform basic computer functions with programs in the Microsoft Suite, Word, Outlook, and Excel.
8. The ability to use hand tools
9. Strong problem solving, communication and analytical skills.

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

ELECTRONICS ENGINEERING TECHNOLOGY

#	Course	Title	Hrs.	Theory/Lab/ Int	% On Campus/ Online	Semester Credit Hours
1	FOU 101	Foundations	48	26/22	80/20	2.0
2	ITSC 1401	Computer Applications	96	10/86	80/20	3.5
3	ENGL 1301	English Composition (Gen Ed)	48	48/0	0/100	3.0
4	ITSC 1411	Computer Technology	96	10/86	80/20	3.5
5	MATH 1314	College Algebra (Gen Ed)	48	48/0	80/20	3.0
*6	PHYS 1401	College Physics I (Gen Ed)	96	32/64	80/20	4.0
7	ETIC 1220	Industrial Safety and Quality	48	16/32	80/20	2.0
*8	CETT 1401	Electronic Circuits I	96	32/64	80/20	4.0
9	SCOM 1315	Fundamentals of Human (Gen Ed)	48	48/0	0/100	3.0
10	CETT 1402	Electronic Circuits Il	96	32/64	80/20	4.0
11	LOTT 2201	Introduction to Fiber Optics	48	16/32	80/20	2.0
12	CETT 1425	Digital Fundamentals	96	32/64	80/20	4.0
13	CETT 1204	High Reliability Soldering	48	16/32	80/20	2.0

14	ELMT2401	Programmable Logic Controllers	96	32/64	80/20	4.0
15	CETT 2205	Cable and Wire Harness	48	16/32	80/20	2.0
16	PSYC 2301	General Psychology (Gen Ed)	48	48/0	0/100	3.0
17	ELMT 2202	Advance Programmable Logic	48	16/32	80/20	2.0
18	RBTC 2239	Robot Programming and	48	16/32	80/20	2.0
19	ELMT 2433	Industrial Electronics	96	32/64	80/20	4.0
20	ELMT 2205	Pneumatics	48	16/32	80/20	2.0
21	CDVI 2201	Career Development/Internship	192	24/8/160	100/00	5.0
Total Hours and Credits – AAS Degree in Electronics Engineering Technology			**1536**	**566/810/160**		**64.0**

NOTE: ***Courses flagged as (Gen Ed) are described in the General Education Courses section of this Catalog.***

ELECTRONICS ENGINEERING TECHNOLOGY COURSE DESCRIPTIONS

FOU 101 FOUNDATIONS 26/22/2.0

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

ITSC 1401 COMPUTER APPLICATIONS 10/86/3.5

Introduces the basic features of Microsoft Office, Windows basics, and file management. Students will develop familiarity with Word, Excel, Access, PowerPoint, email, and Internet basics.

ITSC 1411 COMPUTER TECHNOLOGY 10/86/3.5

This course introduces basic computer hardware, operating software, and networks. It covers installing, upgrading, configuring, troubleshooting, and preventive maintenance of computers and networks with additional elements of soft skills and security.

ETIC 1220 INDUSTRIAL SAFETY AND QUALITY 16/32/2.0

This course covers identification of hazards, personal protective equipment, safe practices, and protection of personnel, property, and equipment in the industrial environment. Safety procedures, including OSHA regulations and hazardous materials handling, are also covered. Includes hands-on approach to the identification, use and care of tools and equipment used in industrial systems.

CETT 1401 ELECTRONIC CIRCUITS I 32/64/4.0

The course introduces the basic concepts and theory of electricity and magnetism with an emphasis on passive electrical elements such as resistors, capacitors, and inductors (RCL) and their applications in alternating current (AC) or direct current (DC) circuits. Students also learn how to build, test, and analyze simple RCL circuits in the laboratory, and use simulation software and test equipment such as power supply, multimeter, signal/function generator, and oscilloscope. Related mathematics and physics concepts are developed alongside these concepts of electrical engineering. **PHYS 1401 College Physics is a prerequisite.**

CETT 1402 ELECTRONIC CIRCUITS II 32/64/4.0

The course introduces the basic concepts and theory of electronic solid-state devices with an emphasis on active electrical elements such as diodes, transistors and integrated circuits, and their applications in AC and

DC circuits. Students also learn how to build, test, and analyze simple solid-state circuits in the laboratory, and use simulation software and test equipment such as power supply, multimeter, signal/function generator, and oscilloscope. Related mathematics and physics concepts are developed alongside concepts of electrical engineering. **CETT 1401 Circuits I is a prerequisite.**

LOTT 2201 INTRODUCTION TO FIBER OPTICS 16/32/2.0

An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors. This course will introduce the students to the origins of fiber optics. Fiber optic components, installation, testing, and safety will be the primary focus of this block of instruction. learn the types and specifications of various cables and hot to choose the proper cable for a project. Fiber optic media to Ethernet signal converts mane by 3M Communication Markets Division will be employed in various networking labs. Reinforcing the necessity to integrate fiber optic cabling and signal conversion. Cable color coding, terminations, testing, and inspection will be covered in detail. The Fiber Optics Association Certification and 3M Certification, Fusion Splice Certification will be presented to the student upon successful completion of this course. Upon successful completion of the course be certified by FOA as a CFOT.

CETT 1425 DIGITAL FUNDAMENTALS 32/64/4.0

This course is an entry level course in digital electronics to include numbering systems, logic gates, Boolean algebra, and combinational logic. Different types of circuits such as of flip-flops, shift registers, adders, display decoders, multiplexers and demultiplexers, semiconductor memories, and other digital devices. The student is also introduced to troubleshooting techniques. Laboratory exercises during this course will provide the student practical experience to reinforce the theory. Upon completion of this course, the student will be able to convert between all number systems used in digital electronics, use gates to perform logic functions using Boolean Equations, analyze sequential logic devices used in counters and shift registers, and build and troubleshoot adder and subtractor circuits. Students will be able to convert analog inputs into digital outputs and vice versa. CETT 1402 **Circuits Il is a prerequisite.**

CETT 1204 HIGH RELIABILITY SOLDERING 16/32/2.0

An explanation of the automated and hand soldering processes plus J STD-OOI E and soldering training including an understanding of the J STD- 001 criteria for acceptable solder connections as well as component preparation, hand soldering, repair, packaging, inspection, ESD control, and process control with hands on experience and critique for assembly and hand soldering of wires and terminals, through-hole components and surface mount components. Upon completion of this course, the student will be able to understand the J-STD-OOI, the requirements for soldered electrical and electronic components, hands on practice of assembly and hand soldering of components. Students will also experience a self-critique of work and application of the standard, understanding of the causes, effects, and contra electric-static discharge as it applies to electronic assemblies. Students will have familiarity with other material and process standards related to the soldering standard, as with inspection and repair techniques. Lastly, students will demonstrate familiarity with process control and statistical process control, certification as an Application Specialist to the J STD-OOI Standard by IPC.

ELMT 2401 PROGRAMMABLE LOGIC CONTROLLERS 32/64/4.0

The student will learn the how to identify and explain the main design characteristics, internal architecture, and operating principles of programmable logic controllers. Students will describe and identify the characteristics of commonly used input and output devices, and develop ladder programs for the logic functions AND, OR, NOR, NAND, NOT and XOR. Students will learn how to develop ladder programs involving internal relays, timers, counters, latching circuits and flashers, and will be required to create programs using ladder logic for the Direct Logic and Siemens PLC's. Upon completion of this course, the student will be able to identify Direct Logic and Siemens PLC components, convert logic gates to ladder diagram, and program combinational logic circuits. Students will also learn/program momentary/latching start

circuits, learn/program timers and counters, and learn/program cycle timer's/flasher circuits. CETT 1425 Digital Fundamental is a prerequisite

CETT 2205 CABLE AND WIRE HARNESS ASSEMBLIES 16/32/2.0
Students will be introduced to materials, methods, tests, and acceptability criteria for producing crimped, mechanically secured, or soldered interconnections and the related assembly activities associated with cable and harness assemblies. The intent is to rely on process control methodology to ensure consistent quality levels during the manufacture of products. Upon successful completion of the course the student will be certified by IPC in IPC/WHMA-A-620C.

ELMT 2202 ADVANCED PROGRAMMABLE LOGIC CONTROLLERS 16/32/2.0
This course will cover advanced applications of programmable logic controllers as used in industrial environments including concepts of programming, industrial applications, troubleshooting, and equipment will be covered. The student will be introduced programmable logic controllers with its symbols, interfaces, memories, programming languages, and PLC ladder logic diagrams. Develop ladder logic to utilize advanced PLC functions; compose a ladder logic program to demonstrate an advanced industrial control application; apply advanced programming techniques for specialized applications. Upon completion of this course, the student will be able to identify characteristics of a PLC and its functions and demonstrate the functions of counters, timers, latching circuits, and interrupts. Students will develop advanced ladder logic diagrams using different PLC scenarios. **ELMT 2401 Programmable Logic Circuits is a prerequisite.**

RBTC 2239 ROBOT PROGRAMMING AND DIAGNOSTICS 16/32/2.0
Students will learn the programming of industrial robotics, development of programming techniques, and the diagnosis of faults in systems. The robotics course brings together aspects of modern electronic processing methods and system design, to develop automated systems that are applicable in many areas including modern manufacturing, aerospace, and nuclear industries. A range of algorithms, tools and development environments are covered, including control systems, micro controller architecture, and programmable digital systems, which enable sophisticated systems to be developed, and implemented in real world applications. The robotics course aims to provide graduates with a broad and deep understanding of technology and current practice in electronic engineering and its applications in robotics including digital systems and control systems. Upon completion of this course, the student will be able to identify what a robot is and its components, create a robotic script using a coordinate system, and develop software base programs using different scenarios.

ELMT 2433 INDUSTRIAL ELECTRONICS 32/64/4.0
This course will cover devices, circuits, and systems primarily used in automated manufacturing and/or process control. In- depth coverage of basic motor controls theory, ladder logic, and control wiring progress to advanced motor controls applications such as variable frequency drives, DC drives, and Programmable Logic Controllers (PLC) integration. Also, computer control and interfacing between mechanical, electrical, electronic, and computer equipment will be studied. Upon completion of this course, the student will be able to describe how electronic input and output circuits are used to control automated manufacturing and/or process systems and identify basic elements used for input, output, timing, and control and define how programmable electronic systems use input data to alter output responses. Students will troubleshoot a representative system and demonstrate how system operation can be altered with software programming. **ELMT 2202 Advanced Programmable Logic Circuits is a prerequisite**.

ELMT 2205 PNEUMATICS 16/32/2.0
This training course is designed to provide necessary skills in pneumatics fundamentals. The training curriculum includes an understanding of pneumatics circuits and applications. Upon completion of this course, the student will be able to define pneumatics, list the advantages and disadvantages of pneumatics, list the basic components of pneumatic system, and read pneumatic schematics. Students will be able to interpret pneumatic symbols and troubleshoot pneumatic components.

CDVI2201 CAREER DEVELOPMENT/ INTERNSHIP 24/8/160/5.0

Upon completion of the career portion of this course students will be able to produce a resume, a cover letter, and a reference list; complete a job application; do research on businesses as part of an exercise or a job search; sit for an interview with an expert in their field; and describe sources provided in the Learning Resource Center.

Upon completion of the internship portion students will be able to integrate the knowledge and skills learned in the program; work under the direction and supervision of business owners, managers, supervisors, or industry experts; maintain ethical and professional work standards while applying classroom learning; and demonstrate in a workplace environment the technical skills acquired throughout the program.

COMPUTER SCIENCE

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CAREER OPPORTUNITIES IN COMPUTER SCIENCE

These workers create or support computer applications, systems, and networks. Career opportunities include network technician, network specialist, network administrator, system administrator, server administrator, security specialist, field service technician, help desk technician, technical support specialist and software developer. Overall employment in computer and information technology occupations is projected to grow much faster than the average for all occupations from 2023 to 2033. About 356,700 openings are projected each year, on average, in these occupations due to employment growth and the need to replace workers who leave the occupations permanently. The median annual wage for this group was $104,420 in May 2023, which was higher than the median annual wage for all occupations of $48,060. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	548
Projected Employment 2035	1,087
Average Hourly Wage 2024	$38.33
Average Openings per year due to Growth	55
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

COMPUTER SCIENCE
COURSES 1-21
1806 CLOCK HOURS
76.0 SEMESTER CREDIT HOURS

EDUCATIONAL OBJECTIVES

Graduates with the Associate of Applied Science Degree in Computer Science gain experience in the following areas: computer hardware, operating systems, local area networking, wide area networking, cabling, router and switch configurations, programming, server and client administration, network security, sales, and customer service. They'll be able to solve problems and communicate effectively. The skill set presented in this program will prepare the graduate for entry-level careers in PC service and repair, network support, desktop support, software developer, and network security administration.

CERTIFICATIONS: The experience gained from this program prepares students for the following professional certifications: CompTIA A+, CompTIA Net+, CompTIA Sec+, CompTIA Linux+, Cisco CCNA,

CompTIA Server +, PCEP - Certified Entry-Level Python Programmer, Fiber Optics (FOA), and CompTIA PenTest +.

TECHNICAL STANDARDS AND ESSENTIAL FUNCTIONS

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodations to be successful in completing this program satisfactorily.

1. Must be able to apply problem solving and analytical skills
2. Must be able to analyze a system's problem and apply principles of computing, networking, and security to identify solutions
3. Must be able to design, develop, and improve computer programs
4. Must be able to solve basic programming problems
5. Must be able to design, implement, and evaluate a computing-based solution and network infrastructure
6. Must be able to implement cybersecurity solutions that comply with global practices
7. Must be able to describe and explain fundamentals of networking, security, hardware, and software
8. Must be customer service oriented and willing to work in a team
9. Must be able to climb ladders and use cabling tools
10. Must be able to work under various environmental conditions

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

COMPUTER SCIENCE

#	Course	Title	Hrs.	Theory/ Lab/Int	% on Campus/ Online	Semester Credit Hours
1	FOU 101	Foundations	48	26/22	80/20	2.0
2	CPMT 1405	IT Essentials: PC Hardware and Software	96	32/64	80/20	4.0
3	ENGL 1301	English Composition (Gen Ed)	48	48/0	0/100	3.0
4	CPMT 1445	Computer Systems Troubleshooting	96	32/64	80/20	4.0
5	ITSC 1416	Linux Installation and Configuration	96	32/64	80/20	4.0
6	ITNW 1458	Network+	96	32/64	80/20	4.0
7	ITSY 1400	Operating System Security	96	32/64	80/20	4.0
8	MATH 1314	College Algebra and Trigonometry (Gen Ed)	48	48/0	80/20	3.0
9	CS 1401	Introduction to Computer Science	96	32/64	80/20	4.0
10	LOTT 2201	Fiber Optic and Cabling	48	16/32	80/20	2.0
11	COSC 1437	Introduction to Programming	96	32/64	80/20	4.0
12	PHYS 1401	College Physics (Gen Ed)	96	32/64	80/20	4.0
13	ITMT 1457	Server Administration Fundamentals	96	32/64	80/20	4.0
14	ITCC 1414	Cisco - Introduction to Networks	96	32/64	80/20	4.0

15	SCOM 1315	Fundamentals of Human Communication (Gen Ed)	48	48/0	0/100	3.0
*16	ITCC 1444	Cisco - Switching, Routing and Wireless Essentials	96	32/64	80/20	4.0
17	ITCS 2201	Customer Service Skills for the Technical World	48	26/22	80/20	2.0
*18	ITCC 2420	Cisco - Enterprise Networking, Security and Automation	96	32/64	80/20	4.0
19	PSYC 2301	General Psychology (Gen Ed)	48	48/0	0/100	3.0
20	ITSY 2472	Ethical Hacking	96	32/64	80/20	4.0
21	CPMT 2499	Professional Development/Internship	222	24/8/190	80/20	6.0
Total Hours and Credits AAS Degree in Computer Science			**1806**	**700/916/190**		**76.0**

NOTE: Courses flagged as (Gen Ed) are described in the General Education Courses section of this Catalog.

COMPUTER SCIENCE COURSE DESCRIPTIONS

FOU 101 FOUNDATIONS 26/22/2.0
Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

CPMT 1405 IT ESSENTIALS PC HARDWARE AND SOFTWARE 32/64/4.0
Upon completion of this course, students will be able to explain how the internal components of a computer work; assemble a computer system; install an operating system; and install/connect associated peripherals; troubleshoot using system tools and diagnostic software; and use simulation and virtual software to investigate networking concepts and analyze network behavior.

CPMT 1445 COMPUTER SYSTEM TROUBLESHOOTING 32/64/4.0
Upon completion of this course students will be able to describe computer system troubleshooting techniques and repair procedures including advanced diagnostic test programs and the use of specialized test equipment; and develop hardware and software troubleshooting techniques and perform procedures used in troubleshooting.

ITSC 1416 LINUX INSTALLATION AND CONFIGURATION 32/64/4.0
Upon completion of this course students will be able to perform Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation; install and administer a Linux system and demonstrate proficiency with Linux utilities, commands, and applications; and identify and resolve security-based issues and integrate a Linux system into an existing network.

ITNW 1458 NETWORK + 32/64/4.0
Upon completion of this course students will be able to prepare for the Computing Technology Industry Association (CompTIA) Network+ certification exam; prepare for a career as a network professional; identify and define terminology, hardware, and software components of computer networks; utilize equipment, protocols, and

topologies to differentiate among various network systems; demonstrate skills in installing network hardware, software, and cable; troubleshoot network connectivity; configure network protocols; and install and configure network client software.

ITSY 1400 OPERATING SYSTEM SECURITY 32/64/4.0

Upon completion of this course students will be able to safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system; identify security threats and monitor network security implementations; use best practices to configure operating systems to industry security standards; identify network security risks; explain security design; describe monitoring solutions; identify sources of computer threats, evaluate potential practices, tools, and technologies to protect individual network systems; establish and sustain an operating system security plan utilizing systems and application security tools; implement procedures to secure and monitor audit logs and set system administrator alerts; develop an organizational operating system security plan that provides for periodic reviews of security policies, procedures, authorized users lists, and software update patches.

CS 1401 INTRODUCTION TO COMPUTER SCIENCE 32/64/4.0

Upon completion of this introductory course students will receive a solid grounding in the fundamental concepts of this discipline. They will be able to understand algorithms, pseudocode, logical thinking, computer organization, evolution of programming languages, hardware, software, virtual machines, and the social issues in computing. Students will start building and designing a computer system. They will create a virtual environment by using tools as graphical user interface, editors, language translators, file systems, and debuggers. By the end of this course student will overview some concepts about intellectual property and national security concerns, the erosion of personal privacy, and the political impact of the proliferation of fake news distributed using social media.

LOTT 2201 FIBER OPTIC AND CABLING 16/32/2.0

Upon completion of this course students will be able to explain fiber optics and its application, including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors; tell the origins of fiber optics; focus on fiber optic components, installation, testing, and safety; tell the types and specifications of various cables and how to choose the proper cable for a project; use Fiber optic media to Ethernet signal converts mane by 3M Communication Markets Division in various networking labs; integrate fiber optic cabling and signal conversion; demonstrate the use of cable color coding, terminations, testing, and inspection; explain Fiber Optics Association Certification and 3M Certification and Fusion Splice Certification; and sit for an exam to become certified by FOA as a CFOT.

COSC 1437 INTRODUCTION TO PROGRAMMING 32/64/4.0

Upon completion of this course students will be able to accomplish coding tasks related to the essentials of programming in a programming language. Students will learn concepts of computer programming, the syntax, and semantics of the programming language, they will develop the skills in resolving typical implementation challenges. Students will understand the logic and structure, literals, variables, and numeral systems, operators and data types, I/O operations, control flow mechanisms, data collections, functions, and exceptions.

ITMT 1457 SERVER ADMINISTRATION FUNDAMENTALS 32/64/4.0

Upon completion of this course students will learn about the different physical servers, operating systems, storage, networking, security, and cloud-based solutions. They will understand how to install, configure, maintain servers. This course will cover storage technologies, fault tolerance requirements and server security. Students will understand how the remote administration works, they will create and use virtual machines, troubleshoot issues in a server room, and the importance of the disaster recovery.

ITCC 1414 CISCO INTRODUCTION TO NETWORKS 32/64/4.0

Upon completion of this course students will be able to explain networking architecture, models, protocols, and networking elements to support the operations and priorities of companies; explain the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum; build simple LANs; perform basic configuration on routers and switches; implement IP addressing schemes; and understand foundational network security.

ITCC 1444 CISCO SWITCHING, ROUTING AND WIRELESS ESSENTIALS 32/64/4.0
Upon completion of this course students will be able to focus on switching technologies and router operations that support small-to-medium business networks, including wireless local area networks (WLAN) and security concepts; perform basic network configuration and troubleshooting; to perform basic network configuration and troubleshooting; identify and mitigate LAN security threats; and configure and secure a basic WLAN.

ITCS 2201 CUSTOMER SERVICE SKILLS FOR THE TECHNICAL WORLD 26/22/2.0
Upon completion of this course, students will learn the importance of the customer support and the help desk role on ground or remotely. They will learn how to help customers use technology to be more efficient in their workplace, how interact with them and also will provide creative and cost-effective solutions.

ITCC 2420 CISCO ENTERPRISE NETWORKING, SECURITY AND AUTOMATION 32/64/4.0
Upon completion of this course students will be able to describe the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks; explain wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks; configure advanced routing and switching, design, secure, operate and troubleshoot enterprise networks; conduct implementation of WAN technologies and QoS mechanisms; and demonstrate understanding of software-defined networking, virtualization, and automation concepts.

ITSY 2472 ETHICAL HACKING 32/64/4.0
Upon completion of this course, students will be able to assemble network defense tools; differentiate between authorized and unauthorized activity on a network; respond to a breach in security using countermeasures designed to minimize the impact of the breach on the network; and document network events; and present an analysis of network breach and plan for remediation. Students will assess network security design and audit network system based on security design; use relevant tools to assure security requirements; and explain how to review security policies and procedures on a regular basis.

CPMT 2499 PROFESSIONAL DEVELOPMENT / INTERNSHIP 24/8/190/6.0
Upon completion of the career portion of this course students will be able to produce a resume, a cover letter, and a reference list; complete a job application; do research on businesses as part of an exercise or a job search; sit for an interview with an expert in their field; and describe sources provided in the Learning Resource Center.

Upon completion of the internship portion students will be able to describe situations that occur during the daily operation of an Information Technology Department; apply the knowledge and skills they have learned in the previous courses in the workplace environment; describe standard operating procedures for the IT industry; and add work experience to their resume.

The student entering the internship program must have completed all courses of the Information Technology program before being placed at a participating site.

PHYSICAL THERAPIST ASSISTANT

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Career Opportunities for Physical Therapists Assistants

Assist physical therapists in providing physical therapy treatments and procedures. May, in accordance with state laws, assist in the development of treatment plans, carry out routine functions, document the progress of treatment, and modify specific treatments in accordance with patient status and within the scope of treatment plans established by a physical therapist. Once a license is granted, the individual will assume the role of an entry-level licensed physical therapist assistant providing safe and effective clinical treatment in working environments such as home health care, clinics, hospitals, nursing homes, acute care, outpatient, rehab hospitals, assisted living centers, aquatic therapy, wound care clinics, schools, county facilities and sports and exercise clinics and physical therapy clinics. The average hourly wage in Texas is $34.64; annual wage is $72,060. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 through 2035 Projections)	Texas
Labor Market Information Employment 2024	337
Projected Employment 2035	7,221
Average Hourly Wage 2024	$36.42
Average Openings per year	62
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

PHYSICAL THERAPIST ASSISTANT PROGRAM

COURSES 1-20
1792 CLOCK HOURS
74.0 SEMESTER CREDIT HOURS

Educational Objectives

Upon completion of the program, students will be able to utilize treatment techniques that include taking vital signs, goniometry, manual muscle testing, activities of daily living, functional training, use of assistive/adaptive devices, balance and gait training, developmental activities, electric current, hydrotherapy, therapeutic use of heat and cold, patient and family education, therapeutic exercise, therapeutic massage, traction, ultrasound, universal precautions, and wound care. Graduates will be able to demonstrate clear

written/oral communication and documentation; follow legal guidelines; and make ethical decisions. Students will gain proficiency in communication and interaction with the patient, family members and other healthcare team members.

Upon completion of WTC's accredited program of physical therapist assistant education, students may be qualified to take the PTA National Physical Therapy Exam (NPTE) and apply for state licensure. Licensure requirements vary by state. Currently in Texas, every two years, 20 hours of continuing education (that includes a mandatory two-hour credit ethics course) is required to renew a state license.

Expected Student Performance

WTC's expected student outcomes for the physical therapist assistant graduate are as follows. Upon completion of the program students will be able to do the following:

1. Practice in a variety of healthcare settings
2. Practice within the laws and regulations of the state of Texas
3. Take the state licensure exam
4. Apply knowledge and skills to assist in treatment of patients under the direct supervision of a physical therapist
5. Communicate (using oral, written, and non-verbal communication skills) with patients, colleagues, and other members of the healthcare community
6. Adhere to professional, legal, and ethical standards as set forth by the Texas Physical Therapy Practice Act
7. Educate others (patients, caregivers, staff, students, and healthcare professionals) using effective teaching methods
8. Participate in activities that address quality of service
9. Practice in a safe manner to minimize risk to patients, self, and others
10. Deliver patient care that reflects respect for individual and cultural differences
11. Demonstrate a commitment to professional and personal growth and advocate the profession through involvement
12. Document client treatment in a timely and effective manner
13. Perform measurement and assessment techniques within the knowledge and limits of practice to assist supervising physical therapists in monitoring and modifying a plan of care
14. Communicate with the supervising physical therapist in a timely manner to report patient progress or concerns
15. Participate in discharge planning and follow-up care

Mission Statement of the Physical Therapist Assistant Program

WTC's Physical Therapist Assistant program provides quality academic and clinical training in a caring professional manner in a modern facility to optimize students' learning and experience. Our commitment to contemporary Physical Therapy education encompasses a dynamic blend of evidence-based practices, research and hands-on experience. The WTC experience, in conjunction with that provided by community partners, will optimize students' abilities to gain state licensure and successfully pursue an ethical and productive career as a physical therapist assistant.

Philosophy of the Physical Therapist Assistant Program

- We believe that the goal of education is to guide the student in a direction of productive work and livelihood in today's dynamic medical society.
- We believe that the role of the instructor is to provide the student a positive environment that is rich in experience, knowledge, and critical thinking to allow for professional and personal growth.
- We believe that the student should be willing to immerse themselves into such an environment and embrace the full potential of what our school and community have to offer.
- We believe that family and community members are key resources in the success of our program,

profession, and the student.

- We believe that consuming and utilizing apt knowledge is strategic to the life-long success of the student.
- We believe that the mission and philosophy of the PTA Program are consistent with that of the institution.
- We believe the sequential curriculum design allows students to build on skills acquired from prerequisite courses to increase the level of their knowledge and of their performance so that they become an entry-level PTA who will make decisions and behave in a professional manner.
- We believe that the program will provide students the educational guidance to become knowledgeable through theory, competent through the application of skills with hands-on training, and adaptable to become a professional graduate with critical thinking skills.

Clinical Affiliations

Students will be placed in clinical settings for three different affiliations consisting of a minimum of 552 hours throughout the course of the program. Program staff attempts to place students locally when possible; however, clinic sites may require the student to travel locally and/or out of town. All expenses, including travel, lodging, fees, and so on, are the responsibility of the student.

Although the student's input is considered for placement at clinical sites, placement sites are not guaranteed. Decisions are also based on student need (clinically) and site availability. Ultimately, placement decisions are made at the discretion of the PTA faculty.

Licensure Examination

Students graduating from the program will be awarded an Associate of Applied Science (AAS degree) in Physical Therapist Assistant and may be eligible to take the PTA National Physical Therapy Exam (NPTE) and apply for state licensure. Licensure requirements vary by state. Students must pass the examination and meet the individual state requirements to receive their license to practice as a physical therapist assistant.

Technical Standards and Essential Functions

PTA students are required to perform job duties specific to the profession. Specifically, a PTA student must possess motor and visual skills that enable them to meet program objectives. The following is a list of skills necessary for all PTA students.

1. Sufficient hearing ability is necessary to respond safely and appropriately during patient treatment, for communicating with other healthcare workers, and for patient assessment.
2. Students must have proficient communication in both oral and written English to allow for effective communication with patients, co-workers, and other healthcare workers. Students must also be able to listen, understand, and communicate ideas presented through spoken words and sentences.
3. Students must have sufficient visual acuity for reading and documentation of patient treatment, reading the physical therapist plan of care, and for the assessment of patients using a variety of measuring devices.
4. Students must be physically able to transfer patients safely from a variety of surfaces, e.g., wheelchairs, mats, beds, and so on and to lift equipment needed for patient care. Students must also be able to tolerate standing for extended periods without breaks.
5. Students must have sufficient manual dexterity to perform fine motor tasks such as palpation, measurements, and demonstration of patient activities.
6. Students must be able to complete all written and practical exams and functional job tasks within the required time limits in the classroom and in clinics.
7. Students must demonstrate emotional health to assure good judgment and the critical thinking skills necessary for safe and effective patient care and to maintain a professional demeanor.
8. Strong problem solving, communication and analytical skills

Note: Program courses are laid out in a manner that allows students to build their theory and skill from previous courses. Exceptions to this include courses denoted with an asterisk (*). These courses are offered in a concurrent manner with a maximum of three courses at a time being concurrent. Course materials from

each course are building blocks of skill and knowledge that cumulatively lead to an entry-level physical therapist assistant competency. Students are required to achieve competency in each course before they can progress to the next set of courses. Students must demonstrate proficiency in treatment skills in the laboratory to receive a passing grade. These measures ensure preparedness for clinical affiliations and patient treatment. Program/Class times are typically 8am to 3pm but will vary.

PHYSICAL THERAPIST ASSISTANT

#	Course	Title	Hours	Theory/Lab/ Clinical Affiliation	% On Campus/ Online	Semester Credit Hours
1*	MATH 1314	College Algebra and Trigonometry (Gen Ed)	48	48/0	80/20	3.0
2	HITT 1305	Medical Terminology I	36	36/0	100/0	2.0
3*	PHYS 1401	College Physics (Gen Ed)	96	32/64	80/20	4.0
4	PTHA 1409	Introduction to Physical Therapy	96	32/64	100/0	4.0
5	BIOL 2401	Anatomy and Physiology I	96	32/64	100/0	4.0
6*	ENGL 1301	Composition (Gen Ed)	48	48/0	0/100	3.0
7	BIOL 2102	Anatomy and Physiology II	52	0/52	100/0	1.5
8	PTHA 1513	Functional Anatomy	96	48/48	100/0	4.5
9*	SPCH 1315	Public Speaking (Gen Ed)	48	48/0	0/100	3.0
10	PTHA 1321	Pathophysiology	64	64/0	100/0	4.0
11*	PSYC 2301	General Psychology	48	48/0	0/100	3.0
12	PTHA 2305	Neurology	56	56/0	100/0	3.5
13	PTHA 2509	Therapeutic Exercise	100	50/50	100/0	5.0
14	PTHA 1261	Clinical PTA I	152	8/0/144	100/0	3.5
15	PTHA 1531	Physical Agents	104	60/44	100/0	5.0
16	PTHA 2431	Management of Neurologic Disorders	80	50/30	100/0	4.0
17	PTHA 1361	Clinical PTA II	152	8/0/144	100/0	3.5
18	PTHA 2435	Rehabilitation Techniques	96	32/64	100/0	4.0
19	PTHA 2339	Professional Issues	48	48/0	100/0	3.0
20	PTHA 1561	Clinical PTA III	276	12/0/264	100/0	6.5
Total Hours and Credits AAS Degree in Physical Therapist Assistant			**1792**	**760/480/552**		**74.0**

NOTE: Courses flagged as (Gen Ed) are described in the General Education Courses section of this Catalog.

PHYSICAL THERAPIST ASSISTANT COURSE DESCRIPTIONS

HITT 1305 MEDICAL TERMINOLOGY I 36/0/2.0

Upon completion of this course students will be able to explain word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations, symbols, surgical procedures, medical specialties, and diagnostic procedures. Students will be able to identify and pronounce medical terms; demonstrate correct spelling and usage of medical terms for documentation; and use medical terms in proper context; build and analyze medical terms; and use medical references as resource tools. This is a mandatory core course as it is designed to prepare the student to practice within the field of Physical Therapy. This course is a prerequisite to Biology 2401.

PTHA 1409 INTRODUCTION TO PHYSICAL THERAPY 32/64/4.0

Upon completion of this course, students will be able to define physical therapy and its role in practical application; delineate differences between a Physical Therapist and a Physical Therapist Assistant; identify the rules and regulations of the Physical Therapist Assistant's scope of practice; identify assistive devices utilized in physical therapy and be able to adjust equipment, including devices for ambulation, wheelchair, and special equipment; demonstrate proper body positioning in varying scenarios; demonstrate appropriate patient interaction through proper communication (verbal and non-verbal) taking into consideration cultural and ethnic differences; identify and demonstrate all transfers using proper body mechanics; use proper medical terminology in documentation and recognize the importance and legal issues of documentation; demonstrate hands-on training of applied clinical skills in a laboratory setting: vital signs, transfers, body mechanics, draping, positioning, and use/adjustment of assistive devices; instruct patients and/or caregivers on safe and proper use of equipment; complete professional conduct self- assessment and review PTA Standards of Ethical Conduct; and recognize individual and cultural differences and respond appropriately in all aspects of physical therapy services. This course is a prerequisite to Biology 2401.

BIOL 2401 ANATOMY AND PHYSIOLOGY I 32/64/4.0

Upon completion of this course, students will be able to identify and describe the anatomical terms, directions, planes, axis and the cavities of the human body; describe basic organization of the human body and its structural levels; describe the atomic, molecular and cellular structure of human organs; identify the organs of each system, define their function, and describe their locations and the relationship among its parts; and describe human body homeostasis and normal lab values. This is a mandatory core course as it is designed to prepare the student to practice within the field of Physical Therapy. This is a prerequisite to Biology 2102.

BIOL 2102 ANATOMY AND PHYSIOLOGY II 0/52/1.5

Upon completion of this course, students will be able to describe the architecture of skeletal muscle; demonstrate palpation of bony landmarks in lab for upper and lower extremities; palpate skeletal muscle during relaxation and active contraction; identify musculature of the upper extremity and trunk: origin, insertion, action, and innervations; identify and label the structures of the heart and cardiovascular system; identify and label the layers of the skin and function of the glands; perform sensory testing with lab partners; identify and describe musculature of the lower extremities: origin, insertion, action and innervations; label the lymphatic structures of the body; label the structures of the lymph nodes and identify and label the respiratory structures; and record RR and HR as well as calculate MHR and THR in a laboratory setting. This is a mandatory core course as it is designed to prepare the student to practice within the field of Physical Therapy. This is a prerequisite to PTHA 2305.

PTHA 1513 FUNCTIONAL ANATOMY 48/48/4.5

Upon completion of this course, students will be able to perform goniometric measurement and identify normal/abnormal range of motion of articulations; explain the basic principles of physics during movement of the body; analyze biomechanics of the body, axes and planes; differentiate among isometric, isotonic, isokinetic, eccentric, and concentric muscle contractions; demonstrate proper manual muscle testing and apply an appropriate grade; identify gait patterns and courses of the gait cycle; distinguish between normal and abnormal patterns; identify joint structure and function as it relates to normal and abnormal biomechanics and to subsequent treatment; identify and assess joint range of motion (active/active assistive/passive/resisted) and accessory motion as it applies to normal and abnormal function; demonstrate applied skills through laboratory activities and practical examinations. This is a prerequisite to PTHA 2305.

PTHA 1321 PATHOPHYSIOLOGY 64/0/4.0

Upon completion of this course, students will be able to define pathogenesis and prognosis; identify and explain the pathogenesis of selected diseases relevant to physical therapy intervention and determine aspects of pathophysiology that affect physical therapy treatment; analyze and describe the current response to acute physiological change in patients' conditions; obtain and assess pertinent pharmacological information and its impact on patient care; identify orthopedic impairments of the upper and lower extremities and identify

orthopedic impairments of the spine and pelvis; and describe therapeutic management of diseases/conditions commonly encountered in physical therapy.

PTHA 2305 NEUROLOGY 56/0/3.5

Upon completion of this course, students will be able to identify and explain the components of neuroanatomy as related to physical therapy; describe the pathogenesis, prognosis, and management of neurological disorders commonly treated in physical therapy; and compare motor and sensory pathways of the nervous system as they pertain to physical therapy impairments and treatment. Identify motor milestones of infants and children. This is a prerequisite to PTHA 1321.

PTHA 1531 PHYSICAL AGENTS 60/44/5.0

Upon completion of this course, students will be able to describe the pain theory, neurophysiology and behavioral responses to pain and pain management; demonstrate appropriate draping and positioning of a patient for the application of modalities; identify the indications, contraindications, and precautions for all therapeutic modalities, including massage; demonstrate appropriate and safe application of physical agents; discuss biophysical principles as they relate to the application of physical agents; demonstrate proper techniques and identify proper indications of therapeutic massage; demonstrate universal precautions with application of all modalities, wound care, and massage; identify the stages of tissue healing and demonstrate proper documentation of wound care; and complete a professional conduct self- assessment. This is a prerequisite to PTHA 1321.

PTHA 2509 THERAPEUTIC EXERCISE 50/50/5.0

Upon completion of this course, students will be able to identify and utilize the theory, principles, and techniques of therapeutic exercise; identify and utilize therapeutic exercise for diagnoses; identify and utilize therapeutic exercise for various patient populations and discuss the rationale for the application and modification of therapeutic exercise, identify signs, symptoms, and contraindications to exercises or activity; compare the difference between aerobic and anaerobic exercises and implementation of each through therapeutic exercise and demonstrate progression of patients following given protocols for specific injury/post-surgical rehabilitation including orthopedic and neurologic impairments; and design and implement an appropriate aquatic therapy exercise and demonstrate accurate documentation of therapeutic exercise. This is a prerequisite to PTHA 1261.

PTHA 1261 CLINICAL PTA I 8/0/144/3.5

Upon completion of this course students will be able to work under a licensed clinical instructor (a Physical Therapist or Physical Therapist Assistant) and will receive hands-on clinical training to demonstrate proficient patient care; use critical problem solving and thinking; describe the use of modalities; develop and instruct home exercise programs; and prepare and deliver a presentation on an appropriate topic. A minimum of one clinical affiliation must be completed in an acute care setting. The student must have a current CPR card, malpractice insurance, health insurance, updated immunization record, and criminal background check to begin their clinical affiliation.

NOTE: Some affiliations may require additional items such as a drug scree, influenza immunization or Covid vaccines. This is a prerequisite to PTHA 1361.

Upon completion of this course, students will be able to demonstrate all available skills at their clinical affiliation site. Students are required to complete a minimum of 144 hours working under a clinical instructor and present a topic of the student's or clinical instructor's choice at the clinical site and obtain pertinent patient information and utilize it to appropriately treat and document the treatment in the patient's official record. PTA Manual for the Assessment of Clinical Skills (MACS) (a method for evaluating clinical performance and a tool to promote teaching and learning) will be completed by the student and clinical instructor during the clinical affiliation. Mastery of "professional behaviors" and "patient history and chart review" skills from the

PTA MACS and receiving "Entry level or Excellent" grades from the clinical instructor are minimum requirements for successful completion of PTHA 1261 The PTA MACS accounts for 60% of the total grade.

PTHA 2431 MANAGEMENT OF NEUROLOGICAL DISORDERS 50/30/4.0
Upon completion of this course, students will be able to distinguish and critically examine the concepts and principles of comprehensive management of neurological disorders; develop, implement, and revise comprehensive treatment approaches for neurological disorders; and appropriately implement neuromuscular rehabilitation techniques in accordance with a prescribed physical therapy plan of care. This is a prerequisite to PTHA 2509.

PTHA 1361 CLINICAL PTA II 8/0/144/3.5
Students will be supervised by a licensed clinical instructor (a Physical Therapist or Physical Therapist Assistant) and will receive hands-on clinical training to demonstrate proficient patient care, critical problem solving and thinking, use of modalities, developing and instructing home exercise programs, documenting, and developing and delivering a presentation on an appropriate topic. The area of practice will vary from that of the first clinical affiliation. A minimum of one clinical affiliation must be completed in an acute care setting. The student must have a current CPR card, malpractice insurance, health insurance, an updated immunization record, and a criminal background check to begin their clinical affiliation. Some affiliations may require additional items such as a drug screen, influenza immunization or Covid vaccines. This is a prerequisite to PTHA 2435.

Upon completion of this course, students will be able to demonstrate all the available skills at their clinical affiliation site at entry-level for each individual skill according to PTA MACS; operate at full autonomy but not a pace of entry-level PTA, complete a minimum of 144 hours working under a clinical instructor, present a topic of the student's or clinical instructor's choice at the clinical site, and obtain pertinent patient information and utilize it to appropriately treat and document the treatment in the patient's official record. PTA MACS (a method for evaluating clinical performance and a tool to promote teaching and learning) will be completed by the student and clinical instructor during the clinical affiliation. Mastery of "professional behaviors," (skills 1-12 from the PTA MACS) and "patient history and chart review" (skills from the PTA MACS) and receiving "Entry level or Excellent" grades from the clinical instructor are minimum requirements for successful completion of PTHA 1361. Students will complete 70% of additional site skills, in addition to the required skills in Clinical PTA I, on the master skills list. The PTA MACS accounts for 60% of the total grade.

PTHA 2435 REHABILITATION TECHNIQUES 32/64/4.0
Upon completion of this course, students will be able to discuss, promote, and compose wellness and preventive programs to promote public health; distinguish and critically examine the concepts and principles of comprehensive management of long-term pathologies; and develop, implement, and revise a comprehensive treatment approach for various long-term pathologies. This is a prerequisite to PTHA 1561.

PTHA 2339 PROFESSIONAL ISSUES 48/0/3.0
Upon completion of this capstone course, students will be able to discuss licensure and job acquisition skills; describe behaviors appropriate in response to various legal, ethical, and professional interactions; and debate socioeconomic influences related to the field of physical therapy; and compose a professional résumé. This is a prerequisite to 1561.

PTHA 1561 CLINICAL PTA III 12/0/264/6.5
Students will be supervised by a licensed clinical instructor (a Physical Therapist or Physical Therapist Assistant) and will receive hands-on clinical training to demonstrate proficient patient care, critical problem solving and thinking, use of modalities, developing and instructing home exercise programs, documenting and developing and delivering a presentation on an appropriate topic. The area of practice will vary from that of the previous clinical affiliations. A minimum of one clinical affiliation must be completed in an acute care

setting. The student must have a current CPR card, malpractice insurance, health insurance, an updated immunization record, and a criminal background check to begin their clinical affiliation. Some affiliations may require additional items such as drug scree, influenza immunization or Covid vaccines.

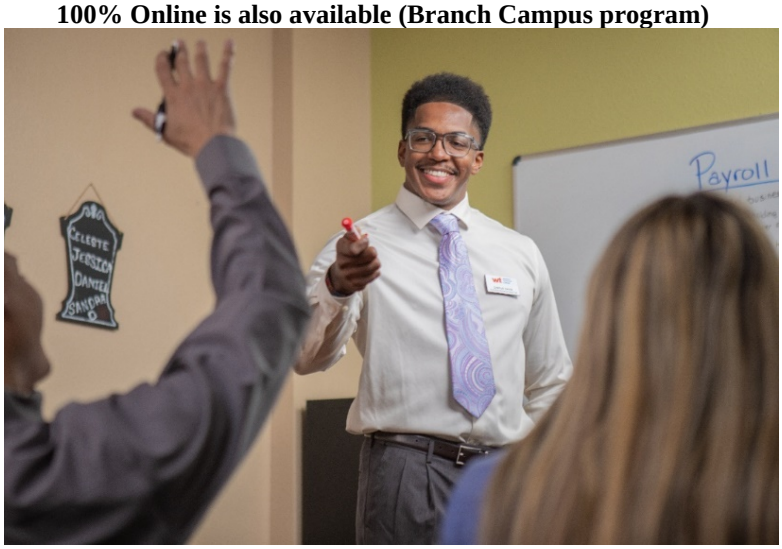
Upon completion of this course, students will be able to demonstrate all the available skills at their clinical affiliation site at entry-level for each individual skill according to PTA MACS; operate at full autonomy and at a pace of entry-level PTA; complete a minimum of 264 hours working under a clinical instructor; present a topic of the student's or clinical instructor's choice at the clinical site; and obtain pertinent patient information and utilize it for appropriate treatment and documentation of the treatment in the patient's official record.

The PTA MACS (a method for evaluating clinical performance and a tool to promote teaching and learning) will be completed by the student and clinical instructor during the clinical affiliation. Mastery of "professional behaviors" and "patient history and chart review" (skills from the PTA MACS) and a grade of "Entry level or Excellent" from the clinical instructor are minimum requirements for successful completion of PTHA 1561. Students will be able to demonstrate entry-level physical therapist assistant skills in accordance with the PTA MACS and complete 100% of additional site skills, in addition to the required skills in Clinical PTA I, on the master skills list. The PTA MACS accounts for 70% of the total grade.

B A C H E L O R D E G R E E S

BUSINESS ADMINISTRATION

Hybrid program available at the Main Campus (9624 Plaza Circle Campus)
100% Online is also available (Branch Campus program)



Current or former employees, stock footage, and/or paid talent are portrayed in these images

CAREER OPPORTUNITIES IN BUSINESS ADMINISTRATION

The Bachelor in Business Administration degree is designed to cultivate knowledge and skills in various industries. From 2023-2033, about 963,500 openings are projected each year. Career opportunities include compliance officers, labor relations specialists, auditors, financial analysts, business managers, general managers, public relations specialists, retail managers, operation coordinators, logistics clerks, accounting clerks, project coordinators, project managers, advertising reps, marketing managers, sales managers, and HR assistants among other business positions. There was an above-average growth rate in colleges and universities, office administrative services, and an average growth rate in business. In May 2024, the median wage for related business occupations averaged $80,920.00 from $49,500.00 from 2021.(Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	2,267
Projected Employment 2035	2,611
Average Hourly Wage 2024	$30.52
Average Annual Openings	231
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

Business Administration
Courses 1-36
2228.0 Clock Hours
120.0 SEMESTER CREDIT HOURS

Educational Objectives

The Bachelor in Business Administration program will help students learn to cultivate various skills and assets businesses need. The program will provide students with the knowledge and technical skills needed for positions in business and may also provide students with opportunities for career advancement. The program provides training in various courses, including but not limited to Microsoft Applications, Accounting, Principles of Lean Six Sigma, Project Management, and Advertising. It will also provide hands-on experience

in Microsoft Word and Excel. This program provides general education, technical, and specialized courses to prepare the graduate for private, public, and government careers.

Certifications

Students in the Bachelor in Business Administration program will have the opportunity to test for the following certifications: Word; Excel; Payroll; Bookkeeping; QuickBooks; Lean Six Sigma (Yellow), Lean Six Sigma (Green) [depending on years of paid work experience]; and Project Management.

Technical Standards and Essential Functions

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodations to complete this program successfully.

1. The ability to maintain a professional demeanor always and interact professionally with fellow students, internship site employees, clientele, administration, and faculty.
2. The ability to listen, understand, and communicate ideas presented verbally and written.
3. The ability to utilize computers and perform basic computer functions with programs such as Word, Outlook, and Excel.
4. Strong problem solving, communication and analytical skills

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

BUSINESS ADMINISTRATION

#	Course Number	Course Title	Hrs.	Theory/ Lab/Int	% on Campus/ Online	Semester Credit Hours
1	FOU101	Foundations	48	22/26	50/50	2.0
2	BMGT1327	Principles of Management	48	48/0	50/50	3.0
3	ITSC1401	MS Office Applications	96	64/32	50/50	5.0
4	ENGL1301	Composition (Gen Ed)	48	48/0	0/100	3.0
5	ACNT1525	Accounting Principles I	96	64/32	50/50	5.0
6	SCOM1315	Fundamentals of Human Communication (Gen Ed)	48	48/0	0/100	3.0
*7	ACNT1526	Accounting Principles II	96	64/32	50/50	5.0
8	SOCI1358	Sociology (Gen Ed)	48	48/0	0/100	3.0
9	BMGT1341	Business Ethics	48	48/0	50/50	3.0
10	MATH1312	Algebra (Gen Ed)	48	48/0	50/50	3.0
11	HRPO2301	Human Resource Management	48	48/0	50/50	3.0
12	MRKG1311	Principles of Marketing	48	48/0	50/50	3.0
13	ECON2301	Principles of Macroeconomics	48	48/0	50/50	3.0
*14	ACNT1213	Computerized Accounting (QuickBooks)	64	32/32	50/50	3.0
*15	ACNT1229	Payroll Accounting	64	32/32	50/50	3.0
*16	ECON2302	Principles of Microeconomics	48	48/0	50/50	3.0
17	BUSG2317	Business Law	48	48/0	50/50	3.0
*18	MATH1324	Mathematics for Business and Social Sciences (Gen Ed)	48	48/0	50/50	3.0
19	BIOL1301	Biology for Non-Science Majors (Gen Ed)	48	48/0	0/100	3.0
20	BUSG2311	Entrepreneurship and	96	48/48	50/50	4.5

		Innovation				
21	PSYC2301	General Psychology (Gen Ed)	48	48/0	0/100	3.0
22	LSSY3310	Principles of Lean Six Sigma	64	32/32	50/50	3.0
23	IBUS3300	Logistics Management	48	48/0	50/50	3.0
24	BMGT3321	Production/ Operation Management	48	48/0	50/50	3.0
*25	ENGL1302	Research Analysis (Gen Ed)	48	48/0	0/100	3.0
*26	LSSG3311	Applied Lean Six Sigma	96	48/48	50/50	4.5
27	PHIL1301	ntroduction to Philosophy (Gen Ed)	48	48/0	0/100	3.0
28	BMGT3301	Project Management	96	48/48	50/50	4.5
29	FINA3315	Business Finance	48	48/0	50/50	3.0
*30	HRPO4302	Human Resource Development	48	48/0	50/50	3.0
31	BMGT4020	E-Business	48	48/0	50/50	3.0
32	MATH1342	Statistics (Gen Ed)	48	48/0	50/50	3.0
33	BMGT4325	International Business Management	48	48/0	50/50	3.0
*34	ADVT4336	Advertising Creative Strategy & Execution	48	48/0	50/50	3.0
*35	BMGT4300	Capstone	48	48/0	50/50	3.0
36	BMGT4388	Career Development & Internship	212	24/8/180	100/0	5.5
Total Hours and Credits Business Administration			**2228**	**1678/370/180**		**120.0**

NOTE: Courses with prerequisites are denoted in the course list with an asterisk (*). Courses flagged as (Gen Ed) are described in the General Education Courses section of this Catalog.

BUSINESS ADMINITRATION COURSE DESCRIPTIONS

FOU 101 FOUNDATIONS 22/26/2.0

Upon completion of this course, students will be able to identify their individual learning styles and apply strategies that support their academic and professional growth. The course focuses on developing effective study habits, time management, goal setting, and communication skills. Students will also explore career readiness tools and techniques that align with their personal learning preferences and professional goals. Additionally, students will be introduced to the college's learning management system, Canvas, and learn how to navigate and use it effectively to support their coursework.

BMGT 1327 PRINCIPLES OF MANAGEMENT 48/0/3.0

Upon completion of this course, students will be able to identify management, organizational structure, and operations management; explain globalization and how it affects organizations; apply the foundation of decision-making; understand the foundations of human behavior and motivating and rewarding employees; and demonstrate how to manage communication and information.

ITSC 1401 MS OFFICE APPLICATIONS 64/32/5.0

Upon completion of this course, students will be able to use Microsoft Word, Excel, and other features of Microsoft Office; format text, compress files, create new documents, insert text, format graphics, create tables, insert footnotes, create columns, create charts, insert hyperlinks, create and manage worksheets and workbooks; manage data cells and ranges; create tables; perform operations with formulas and functions; create charts and objects; and evaluate complex formulas.

ACNT 1525 ACCOUNTING PRINCIPLES I 64/32/5.0

Upon completion of this course, students will be able to prepare and examine income statements, statements of retained earnings, and balance sheets; work with assets, liabilities, owner's equity, and financial statements; use revenue and expense accounts; list the rules of debit and credit; execute the accounting cycle; and perform essential payroll functions. Students will demonstrate the ability to record transactions and adjust entries, post to the ledger, close periods, and see the effects in the ledger accounts.

ACNT 1526 ACCOUNTING PRINCIPLES II 64/32/5.0

Upon completion of this course, students will be able to journalize transactions for Accounts Receivable, long-term notes payable and mortgage payable, apply commonly used depreciation methods, describe and illustrate how debt and equity securities are reported, explain different inventory valuations such as FIFO, LIFO, average cost method, explain how financial statements are used to analyze a business and perform a horizontal and vertical analysis of financial statements and execute a Statement of Cash Flow utilizing direct and indirect methods. Students will be able to launch Connect for practice purposes and lab.

Prerequisite: ACNT 1525 Accounting Principles I

BMGT 1341 BUSINESS ETHICS 48/0/3.0

Upon completion of this course, students will be able to identify ethical management and ethics in organizations; describe the two realms that law and ethics govern; name the rules of business ethics and describe ethical requirements specific to professionals; assess employee rights and describe the justification of whistleblowing and the meaning of loyalty; explain why employers must know trade secrets, conflict of interest, the challenges of privacy, and the meaning of discrimination and harassment; and explain how business decisions may be unethical even if legal.

HRPO 2301 HUMAN RESOURCE MANAGEMENT 48/0/3.0

Upon completion of this course, students will be able to summarize the basic equal employment opportunity laws and how each impacts HR functions such as recruitment and selection; explain the defenses against discrimination allegations and provide examples of what employers can and cannot legally do with respect to recruitment, selection, promotion, and layoff practices; describe training and appraising processes; write job descriptions, including summaries and job functions using the Internet and traditional methods; explain and provide examples of the need for branding in effective recruiting; do a background check on job candidates; and how to attend to employee labor relations, health and safety, and fairness concerns.

MRKG 1311 PRINCIPLES OF MARKETING 48/0/3.0

Upon completion of this course, students will be able to identify the marketplace and customers; identify the five core marketplace concepts; describe customer relationship management; identify strategies for creating value for customers; create business portfolios and develop growth strategies; describe how companies analyze and use marketing information; and how companies find and develop new product ideas.

ECON 2301 PRINCIPLES OF MACROECONOMICS 48/0/3.0

Upon completion of this course, the student will be able to explain the roles of scarcity, specialization, opportunity cost, and cost/benefit analysis in economic decision-making; identify the determinants of supply and demand; demonstrate the impact of shifts in both market supply and demand curves on equilibrium price and output; define and measure national income and rates of unemployment and inflation; identify the phases of the business cycle and the problems caused by cyclical fluctuations in the market economy; and explain the role of money and the money supply.

ACNT 1213 COMPUTERIZED ACCOUNTING (QUICKBOOKS) 32/32/3.0

Upon completion of this course, students will be able to identify QuickBooks forms and use lists and registers in QuickBooks, create invoices, record sales transactions on account, and create payroll checks; explain the concepts for computerized accounting for payables; and record depreciation and enter the adjusting entries required for accrual-basis accounting; set up a company using the Easy Step Interview and QuickBooks Setup.
Prerequisites: ACNT 1525 Accounting Principles I

ACNT 1229 PAYROLL ACCOUNTING 32/32/3.0

Upon completion of this course, students will be able to discuss payroll laws and regulations; determine gross earnings, payroll deductions, federal and state payroll taxes, and tax reports; define the common payroll periods: weekly, biweekly, semi-monthly, and monthly; tell the difference between temporary and contract workers; compute gross earning based on regular and overtime hours worked; identify and several common "pretax" items that lessen the amount of income tax for employees; and compute various payroll taxes and withholding to arrive at "net-pay"; and calculate Social Security and Medicare taxes on employee earnings.
Prerequisite: ACNT 1525 Accounting Principles I

ECON 2302 PRINCIPLES OF MICROECONOMICS 48/0/3.0

Upon completion of this course, students will be able to explain and apply the production function and the Law of Diminishing Marginal Productivity; calculate and graph short-run and long-run costs of production and identify the four market structures by characteristics; calculate and graph the profit-maximizing price and quantity in the output markets by the use of marginal analysis; use marginal analysis to determine the profit-maximizing price and quantity of resources in factor markets under perfect and imperfect competition; describe governmental efforts to address market failures such as monopoly power, externalities, and public goods; and use the concept of comparative advantage to identify the benefits of free trade.
Prerequisite: ECON 2301 Principles of Macroeconomics

BUSG 2317 BUSINESS LAW 48/0/3.0

Upon completion of this course, students will be able to explain basic constitutional law and key terms and concepts of the formation of sales and lease contracts; identify credit, mortgages, and debtor's rights; explain employment, worker protection, and immigration law; and identify and describe distinct types of business entities such as sole proprietorship, partnerships, and corporations.

BUSG 2311 ENTREPRENEURSHIP AND INNOVATION 48/48/4.5

Upon completion of this course, students will be able to name the characteristics of successful entrepreneurs; write and present a business plan, including how to conduct a feasibility study, how to develop a business model, and the ethical and legal issues facing new firms; describe ethical and legal issues facing new firms; explain the importance of getting financing or funding; define intellectual property and patents; and define franchising and tell how it works.

LSSY 3310 PRINCIPLES OF LEAN SIX SIGMA 32/32/3.0

Upon completion of this course, students will be able to identify the role of a Lean Six Sigma Yellow Belt within the organization; apply project management skills; identify process improvements that support a project; and explain how a decrease in process variation can lead to defect reduction and improvement in profits, employee morale, and quality of products or service.; explain Six Sigma Metrics; and identify monitor, and control "profit-eating" practices in a process.

IBUS 3300 LOGISTICS MANAGEMENT 48/0/3.0

Upon completion of this course, students will be able to describe a supply chain, define supply chain management, and explain the importance of supplier partnerships and the role of demand forecasting; compare and contrast the various modes of transportation and their impacts on costs; and explain the various causes of the bullwhip effect and how they impact process; name and explain the forms of logistics: Financial Logistics, Inventory Management Logistics, Warehouse Management Logistics, Packing and Materials Handling Logistics, and Transportation Logistics; and address how today's technology affects the overall environment of logistics, organizational and managerial issues in logistics, the importance of facility location, and transportation infrastructures.

BMGT 3321 PRODUCTION/OPERATION MANAGEMENT 48/0/3.0

Upon completion of this course, students will be able to identify product and process designs, implement productivity improvement, and explain Quality Management; explain the steps of new product development; apply forecasting methods and capacity planning measures; and describe the aspects of production and operations management in the manufacturing industry including decision-making, capacity planning, aggregate planning, forecasting, and inventory management, distribution planning, materials requirements planning (MRP), project management and quality control.

LSSG 3311 APPLIED LEAN SIX SIGMA 48/48/4.5

Upon completion of this course, students will be able to analyze and solve quality problems and apply quality or continuous improvement projects; demonstrate the uses of Six Sigma tools and processes; and explain the DMAIC methodology (Define, Measure, Analyze, Improve, and Control); and define improvement projects to satisfy the customer and reduce variation.

Prerequisite: LSSY 3310 Principles of Lean Six Sigma

BMGT 3301 PROJECT MANAGEMENT 48/48/4.5

Upon completion of this course, students will be able to explain why effective project management contributes to achieving strategic objectives and to gain a competitive advantage; tell how managers propose, plan, secure resources, budget, and lead project teams to successful completion of their projects; demonstrate how to use checklists and simple scoring models to select projects; and construct and explain Gantt charts.

FINA 3315 BUSINESS FINANCE 48/0/3.0

Upon completion of this course, students will be able to apply the principles of business finance that support the overall financial strategy of an organization; apply the standard and accepted accounting principles when reporting, recording, and projecting financial information; explain the structure of financial statements; and utilize the time value of money, management of cash flow, financial sources, financial return, and risk concepts to conduct professional financial analyses.

HRPO 4302 HUMAN RESOURCE DEVELOPMENT 48/0/3.0

Upon completion of this course, students will be able to explain Human Resource Development (HRD) and the need for HRD and design; implement HRD programs and evaluate HRD programs; demonstrate coaching and performance management; demonstrate employee counseling, well-being, and wellness; describe the scope and implementation of career management and development.

Prerequisite: HRPO 2301 Human Resources Management

BMGT 4020 E-BUSINESS 48/0/3.0

Upon completion of this course, students will be able to identify and explain the variety of e-business models, i.e., business to business, business to customer, consumer to consumer; determine an appropriate e-business

model and apply it to a specific business; explain the implementation of the 4P's to a specific target market; define the term "Internet economy"; and describe the severity of downturns in the business cycle on traditional vs. Internet businesses; describe the opportunities that can be provided when private and public organizations interact with their customers, clients, or stakeholders; create services, and other solutions that support the strategy and desired goal for both companies and society at large; engage in e-commerce (buying and selling over the Internet) and e-business (conducting business using Internet technology).

BMGT 4325 INTERNATIONAL BUSINESS MANAGEMENT 48/0/3.0

Upon completion of this course, students will be able to assess the political, economic, legal, and technological, environment; explain the role of culture, communicating, cross-cultural negotiation, and decision-making; explain theories of international trade and economic development; formulate strategy; identify strategic alliances, small business, and emerging economy firms; identify organization structure and control systems; and describe staffing, training, and compensation for global operations; describes the challenges of marketing internationally and starting and maintaining international business relationships.

ADVT 4336 ADVERTISING CREATIVE STRATEGY & EXECUTION 48/0/3.0

Upon completion of this course, students will be able to describe advertising's role in society, its procedures, and practices; explain unexpected but relevant sales messages and demonstrate what identity and image strategy do to products; create a strategy for reaching out to an ever-changing marketplace; design advertisements for print, broadcast, interactive, and specialty media that meet specific campaign objectives; demonstrate how to connect with the consumer's heart and mind; explain the power of radio, television, and social media; and identify government regulations on advertising. **Prerequisite: MRKG 1311 Principles of Marketing**

BMGT 4300 CAPSTONE 48/0/3.0

Upon completion of this course, students will be able to develop a detailed project proposal and complete a final capstone project linking the areas of study of the student's degree plan with their intellectual interests; use research, reviews, and analysis (including the identification of opportunities and threats); build competitive advantage and how to build and develop a company; prepare and present a business proposal.
Prerequisite: All preceding courses

BMGT 4388 CAREER DEVELOPMENT & INTERNSHIP 24/8/180/5.5

Upon completion of this course, students will be able to conduct a targeted job search complete with portfolio, references, and job leads; create a resume and cover letter; demonstrate their interviewing skills; demonstrate strategies to implement when invited to an interview; practice salary negotiation strategies; define a team and its functions; and conduct collaborative work in the community; recognize the importance of individual and cultural differences and respond appropriately; demonstrate initiative and interest in performing the duties assigned, and maintain good attendance and punctuality; maintain a professional appearance; demonstrate competency in Word, Excel, human resource management, marketing, advertising, accounting, payroll, and project management; make ethical decisions; use organizational skills and complete projects assigned on a timely basis; demonstrate the ability to work in a team; meet deadlines; and keep their work area clean and organized.
Prerequisite: All preceding courses

NURSING

Available at 9451 Diana Drive - Branch Campus

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Career Opportunities

Registered nurses (RNs) provide and coordinate patient care and educate patients and the public about various health conditions. Registered nurses work in hospitals, physicians' offices, home healthcare services, and nursing care facilities. Others work in outpatient clinics and schools. Career opportunities include registered nurse, psychiatric mental health nurse, nurse case manager, legal consultancy nurse, diabetes management nurse, ER nurse, obstetrics nurse, pediatrics nurse, intensive care nurse, and research nurse. Registered nurses usually take one of three education paths: a bachelor's degree in nursing, an associate's degree in nursing, or a diploma from an approved nursing program. Registered nurses must be licensed. The median annual wage for registered nurses was $86,070 in May 2023. Employment of registered nurses is projected to grow 6 percent from 2023 to 2033, faster than the average for all occupations. About 194,500 openings for registered nurses are projected each year, on average, over the decade. (Source: D.O.L. Occupational Outlook Handbook,2023-2024 Edition)

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	5,791
Projected Employment 2035	7,221
Average Hourly Wage 2024	$36.42
Average Openings per year due to Growth	496
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

NURSING
COURSES 1-40
2265 CLOCK HOURS
120.0 SEMESTER CREDIT HOURS

Educational Objectives

The Bachelor of Science in Nursing program at WTC provides students with the theory, laboratory and clinical experiences that will serve as preparation for an entry level position in registered nursing. Upon successful completion of the program, the graduate is eligible to take the NCLEX-RN (National Council Licensure Examination-RN) exam to obtain licensure, as required by the State of Texas to practice nursing. Nursing theory provides the foundation of nursing practices and guides students with what and how to perform in clinical practices. The clinical portion of the program provides students with actual hands-on experience in giving basic-to-advanced nursing care to patients of all ages. Clinical experience training is provided in skills simulation lab, in long-term treatment facilities, and at acute hospital settings.

The BSN program consists of 120 semester credit hours that is divided into 8 semesters, where the initial 3 semesters cover general education courses, and the remaining 5 semesters cover the nursing major courses. The nursing program semester is 16 weeks long and the entire BSN program runs for 32 months from start to finish.

Expected Student Outcomes

Upon completion of this program, each student will be able to do the following:

1. Integrate theory and knowledge of the science, social sciences, humanities, and nursing as a foundation for nursing practice.
2. Apply the nursing process to manage the care of individuals, families, and populations with respect for diversity in a variety of health care settings.
3. Demonstrate the inherent professional values and behaviors in the delivery of individual, families, and population centered care.
4. Demonstrate cultural sensitivity in meeting the physical and psychosocial needs of the client
5. Provide care that protects the client through the utilization of safety measures and infection control practices.
6. Facilitate inter-professional and intra-professional communication and collaboration to improve practice, minimize risks, and optimize health outcomes.
7. Apply the competencies of leadership, quality improvement and patient safety to improve health outcomes for individuals, families, and populations.
8. Contribute to the development and implementation of a therapeutic teaching plan utilizing Maslow's Hierarchy of Needs.

Mission and Philosophy

The nursing program mission is to prepare culturally sensitive professional nurses who are well versed in the delivery of safe, compassionate and holistic patient-centered care using evidence-based interventions and sound clinical judgment for individuals, families, populations and communities across the lifespan. We are committed to doing so through the application of an academically sound curriculum delivered by dedicated and exceptional educators.

Technical Standards and Essential Functions

To better prepare students planning to enter nursing, an understanding of the physical and mental requirements expected by employers is essential. The student is expected to meet the same professional abilities during clinical/lab instruction in the Nursing Program. Students must be able to:

1. Demonstrate consistent ability to deliver safe competent nursing care.
2. Demonstrate ability to deliver care across the age spectrum with honesty, civility, integrity, and non-discrimination.
3. Demonstrate effective communication and interpersonal skills.
4. Must be able to read and write in English and communicate verbally in English.
5. Demonstrate emotional stability and maturity in various circumstances through interpersonal relationships with staff, patients, and visitors.
6. Demonstrate ability to differentiate odors and colors in the clinical setting.
7. Have normal/corrected vision and hearing within the normal range.
8. Demonstrate ability to direct and work in stressful, changing, and high paced facilities demonstrating coping skills.
9. Demonstrate good body mechanics, lift/carry a minimum of twenty-five (25) lbs. independently and fifty (50) lbs. with assistance.
10. Demonstrate ability to tolerate intermittent sitting, standing, bending, and walking. Full range of motion is required.
11. Demonstrate good manual and finger dexterity.
12. Demonstrate working knowledge and ability to use computers.

13. Function to full extent as there are no "limited or light duty assignments"
14. Strong problem solving, communication and analytical skills

Licensure Examination

Approximately three months prior to graduation, students must submit the required applications and fees in preparation for licensure. The application process is two-fold; first, the State Board of Nursing in Texas requires an application and fee to process the license, and secondly, the testing center, Pearson Vue, requires a separate application and testing fee to register the applicant to take the licensing exam. The dean of nursing will provide the students with the necessary information to facilitate this process. Additionally, the state of Texas requires all applicants for the NCLEX- RN to pass the Texas Nursing Jurisprudence Examination online prior to been issued an authorization to test for the NCLEX examination. Refer to the TBON website http://www.bne.state.tx.us/ under the Licensure tab and then click on Examination for details.

NURSING

#	Course	Title	Hrs.	Theory/ Supervised Lab/Clinical	Semester Credit Hours
1	ENGL 1301	English Composition I	45	45/0/0	3.0
2	BIOL 1401	Anatomy & Physiology I	75	45/30/0	4.0
*3	PHIL 1301	Philosophy	45	45/0/0	3.0
4	HIST 1301	U.S. History I	45	45/0/0	3.0
5	MATH 1312	Algebra	45	45/0/0	3.0
*6	SPCH 1315	Public Speaking	45	45/0/0	3.0
*7	PHIL 2255	Medical Ethics & Issues	45	45/0/0	3.0
8	BIOL 2421	Microbiology	75	45/30/0	4.0
9	BIOL 2402	Anatomy & Physiology II	75	45/30/0	4.0
*10	SOCI 1358	Sociology	45	45/0/0	3.0
*11	PSYC 1380	Life Span Human Development	45	45/0/0	3.0
*12	BIOL 1360	Introduction to Human Nutrition	30	30/0/0	2.0
*13	PSYC 2301	General Psychology	45	45/0/0	3.0
14	ENGL 1302	Research Analysis	45	45/0/0	3.0
15	MATH 1342	Statistics	45	45/0/0	3.0
*16	CHEM 1470	Chemistry	75	45/30/0	4.0
17	PATHO 2330	Human Pathophysiology	45	45/0/0	3.0
18	POLS 3389	Policy & Politics in Healthcare	45	45/0/0	3.0
19	NURS 2200	Foundation of Nursing	45	45/0/0	3.0
20	NURS 2400L	Foundation of Nursing Lab/Clinical	90	20/30/40	3.0
21	NURS 2210	Gerontologic Nursing	60	45/15/0	3.5
22	NURS 2220	Health/Physical Assessment	60	30/30/0	3.0

23	NURS 2230	Pharmacology	45	45/0/0	3.0
24	NURS 3300	Medical Surgical Nursing I	45	45/0/0	3.0
25	NURS 3500L	Medical Surgical Nursing I Lab/Clinical	120	30/30/60	4.0
*26	NURS 3270	Cultural Diversity & Health	30	30/0/0	2.0
*27	NURS 3384	Nursing Research	30	30/0/0	2.0
28	NURS 3340	Medical Surgical Nursing II	45	45/0/0	3.0
29	NURS 3440L	Medical Surgical Nursing II Lab/Clinical	120	30/30/60	4.0
30	NURS 3250	Mental Health	30	30/0/0	2.0
31	NURS 3150L	Mental Health Lab/Clinical	30	6/12/12	1.0
32	NURS 3320	Community Health Nursing	60	30/6/24	2.5
33	NURS 4370	Medical Surgical Nursing III	45	45/0/0	3.0
34	NURS 4370L	Medical Surgical Nursing III Lab/Clinical	120	30/30/60	4.0
35	NURS 4460	Maternal Child Nursing	60	60/0/0	4.0
36	NURS 4460L	Maternal Child Nursing Lab/Clinical	60	16/0/44	2.0
37	NURS 4410	Nursing Leadership & Management	90	45/30/15	4.0
*38	NURS 4250	Professional Nursing Issues	30	30/0/0	2.0
39	NURS 4380	Preceptorship + Lab/Clinical	90	0/10/80	2.0
40	NURS 4390	Nursing Capstone	45	45/0/0	3.0
Total Hours and Credits - Bachelor of Science in Nursing			**2265**	**1527/343/395**	**120.0**

NOTE: Program courses for the Nursing curriculum are designed in a sequential manner. Each course of the curriculum is ordered such that the subsequent material is based on skills acquired from prerequisite courses. Exceptions to this include courses denoted with an asterisk (*).

NURSING COURSE DESCRIPTIONS

NURS 2200 FOUNDATION OF NURSING 45/0/0 3.0

This course promotes nursing as an evolving art and science directed to human health and well-being. Students will cultivate the Quality and Safety Education for Nurses (QSEN), critical thinking, and blended skills practiced within the nursing process to serve patients and the public. Students will combine cognitive, technical, and interpersonal skills to promote the four aims of nursing: promoting health; preventing illness; restoring health and facilitating coping with illness or death. Students will identify with their profession and share in its rewards by developing an attitude of caring and accountability in patient care. **All General Education Courses must be completed as prerequisites to this course.**

Upon completion of this course, students will be able to

- Describe the foundations of nursing, including health and illness, human needs, nursing theory, research, and evidence-based practice.
- Evaluate the settings in which health care is practiced and the methods taken to ensure continuity of care for the patient.
- Describe and practice the components of the nursing process: assessing; diagnosing; planning; implementing; and evaluating.
- Use theories of growth and development across the lifespan to enhance the patient care plan.

- Describe the roles basic to nursing care, including communicator; teacher; counselor; leader; manager and care coordinator.
- Discuss the actions basic to nursing care: maintaining asepsis, measuring vital signs, assessing health, promoting safety, incorporating complementary and alternative therapies, administering medications, and caring for patients in all healthcare settings.
- Promote healthy physiologic responses in patients: hygiene, skin integrity and wound care, activity, rest and sleep, comfort and pain management, nutrition, urinary and bowel elimination, oxygenation and perfusion, electrolyte, and acid-base balance.
- Develop plans of care to help patients meet basic psychosocial needs: self-concept; stress and adaptation; loss, grief, and dying; sensory stimulation; sexuality; and spirituality.

NURS 2400L FOUNDATION OF NURSING LAB/CLINICAL 20/30/40 3.0

This course presents basic nursing skills that will assist nursing students to incorporate cognitive, technical, interpersonal, and ethical/legal skills into safe and effective patient care. The skills included focus on basic principles of patient care, including an emphasis on safe medication administration. Students will apply the nursing process as they care for patients in skilled units of a long-term care facility. **All General Education Courses must be completed as prerequisites to this course.**

Upon completion of this course, students will be able to:

- Demonstrate basic nursing care in a safe manner in an instructor supervised skills laboratory and real-life patient care settings.
- Collect subjective and objective health assessment data for adult patients in a long- term care setting.
- Apply the nursing process as a method for clinical reasoning and decision making.
- Use effective communication with patients, instructor and peers.
- Demonstrate accurate calculation of medication dosages.
- Demonstrate accurate and complete documentation of patient care.
- Demonstrate nursing interventions to promote basic needs in the clinical setting, including activity and exercise; patient safety; hygiene; oxygenation; fluid, electrolyte, and acid base balance; sleep; pain management; nutrition; urinary elimination; bowel elimination; skin integrity and wound care; and sensory alterations.
- In a simulated laboratory setting and where opportunities are available in a real-life patient setting, demonstrate the following procedures according to best practices and evidenced based research:
    - Asepsis and Infection Control: handwashing; PPE; sterile field; sterile gloves.
    - Vital Signs.
    - Safety: fall prevention and restraints.
    - Medication Administration: oral, injectable (intradermal, SQ, IM); transdermal; eye drops; ear drops; nasal spray; vaginal; rectal; inhaled; metric and household systems of measurement; drug abbreviations, labels, and packaging; calculation of oral medications; calculation of liquids for injection.
    - Perioperative: deep breathing; coughing; splinting; leg exercises; post-op transfers to room.
    - Hygiene: bathing; oral care; contact lenses; hair; shaving; nail care; bed making.
    - Skin Integrity and Wound Care: dry, sterile dressing; saline-moistened dressing; hydrocolloid dressing; wound irrigation; wound culture; Montgomery straps; suture removal; staple removal; heating pad; warm compress; cold therapy.
    - Activity: turning in bed; moving a patient up in bed; transferring; ROM exercises; ambulation; graduated compression stockings; pneumatic compression devices; CPM device; sling.
    - Comfort and Pain Management: promoting comfort; back massage.
    - Nutrition: assisting with eating.
    - Urinary Elimination: bedpan, urinal, bedside commode.
    - Bowel Elimination: enema; digital removal of stool; fecal incontinence device.

- Oxygenation: pulse oximeter; incentive spirometer; oxygen by nasal cannula and mask.
- Cardiovascular Care: CPR.
- Neurologic Care: logrolling; cervical collar; seizure precautions.
- Laboratory Specimen collection: nasal swab; nasopharyngeal swab; sputum specimen; urine specimen, clean catch; occult blood in stool; stool for culture; capillary blood sample for glucose testing.

NURS 2210 GERONTOLOGIC NURSING 45/15/0 3.5

This course provides a foundation for the nurse's role in providing wellness-oriented nursing care in all stages of health and illness for older adults in any health care setting. Students will understand the complex needs of older adults in the context of age- related changes and individual risk factors as they apply the nursing process to deliver holistic care in a long-term care clinical setting through the roles of practitioner, educator, advocate, and researcher.

Upon completion of this course, students will be able to develop a wellness philosophy in the care of older adults and explain the Functional Consequences Theory applied to the nursing care of older adults. Students will further be able to describe the role of the nurse in promoting wellness for older adults about aspects of daily life as well as complex situations such as medication management, elder abuse, and legal and ethical concerns. Apply nursing interventions to support wellness in psychosocial functioning. Students will also be able to differentiate between age-related changes and risk factors that affect all aspects of physiological and psychosocial function for older adults and identify those that are most amenable to health promotion interventions. Lastly, students will be able to apply concepts of wellness to older adults through all stages of health and illness, including acute and chronic conditions, pain management, and at the end of life. **All General Education Courses must be completed as prerequisites to this course.**

NURS 2220 HEALTH/PHYSICAL ASSESSMENT 30/30/0 3.0

This course provides assessment tools to assist the student to obtain a thorough history and perform a comprehensive physical examination of adult and geriatric patients. Students will learn to elicit information related to patient complaints and use the history findings and critical thinking skills to prioritize and guide the physical examination. Health promotion and disease prevention are highlighted for students to incorporate when educating patients, families, and communities. Upon completion of this course, students will be able to explain the components of the health assessment. Students will analyze a written patient history and physical examination findings to identify patient problems and develop a nursing care plan. Students will also be able to describe the phases of the nurse-patient interview, use therapeutic communication techniques during the patient interview and physical examination and obtain a comprehensive health history from a patient. Students will perform and document a comprehensive physical examination using a systematic head-to-toe approach on a simulated adult patient, and recognize normal physiologic changes in the older adult. Lastly, students will perform and document a health history and physical examination utilizing screening tools which address common concerns in the older adult and demonstrate proper use of equipment utilized in physical examination. **All General Education Courses must be completed as prerequisites to this course.**

NURS 2230 PHARMACOLOGY 45/0/0 3.0

This course introduces nursing pharmacology to build a foundation for administering drug therapy to patients. Discussion of the major drug groups focuses on therapeutic actions and indications, pharmacokinetics, contraindications and cautions, adverse effects, clinically important drug-drug interactions, and nursing considerations which emphasize the nursing process with focus on patient care and teaching. Prototypes of the major drug groups are emphasized. Lifespan considerations, evidence for best practice, patient safety, and critical thinking are integrated throughout the course.

Upon completion of this course, students will be able to discuss the major concepts associated with pharmacology including pharmacodynamics, pharmacokinetics, therapeutic effects, adverse effects, and factors affecting drug therapy. Students will be able to explain the legal regulations for drug development,

approval, testing, and challenges associated with drug therapy in current times. Students will describe the major drug groups, their indications for use; correlate the actions of the major drug groups within the body system(s) affected, and identify the prototype for each of the major drug groups. Students will discuss the important lifespan considerations associated with the major drug groups and explain the mechanism of action, indications, contraindications and cautions, common adverse effects, and clinically important drug-drug interactions for each of the major drug groups. Lastly, students will relate the importance of renal and hepatic function with drug therapy, and describe the nursing considerations related to drug therapy, including important teaching points, for each of the major drug groups. **All General Education Courses must be completed as prerequisites to this course.**

NURS 3300 MEDICAL SURGICAL NURSING I 45/0/0 3.0

This course provides an understanding of the nurse's role in patient-centered care within evolving practice environments across the spectrum of health and illness. This course will address nursing care issues including pain management; fluid and electrolyte balance; perioperative care; gas exchange; digestive function; renal function; sensory and integumentary function from a physiologic, pathophysiologic, and psychosocial context. Students will apply this knowledge through the nursing process and clinical reasoning in an acute care clinical setting as they assume the roles of practitioner, educator, advocate, and researcher through NURSS 3500L Medical Surgical Nursing I Lab/Clinical.

Upon completion of this course, students will be able to discuss genetics and genomics, chronic illness, and rehabilitation as they relate to professional nursing practice, and demonstrate a comprehensive understanding of pain, fluid and electrolyte balance, perioperative care, gas exchange, digestive, renal, sensory, and integumentary function. Students will apply the nursing process to patients experiencing pain, fluid and electrolyte imbalance, surgery, and disorders of gas exchange, digestion, renal, sensory, and integumentary dysfunction. Furthermore, students will be able to discuss safe, effective nursing care for patients with pain, fluid and electrolyte imbalance, perioperative needs, and disorders of gas exchange, digestion, renal, sensory, and integumentary dysfunction through the nursing roles of practitioner, educator, advocate, and researcher. **Semester four courses must be completed as prerequisites to this course.**

NURS 3500L MEDICAL SURGICAL NURSING I LAB/CLINICAL 30/30/60 4.0

This course emphasizes safe, effective, compassionate patient care as nursing students learn to incorporate cognitive, technical, interpersonal, and ethical/legal aspects of skill application. The skills include interventions commonly applied to patients experiencing acute and critically acute health conditions, with an emphasis on safe intravenous medication administration, ECG interpretation and life-saving nursing interventions. Students will apply this knowledge through the nursing process and clinical reasoning in an acute care clinical setting as they assume the roles of practitioner, educator, advocate, and researcher. **Semester four courses must be completed as prerequisites to this course.**

Upon completion of this course, students will be able to:

- Demonstrate nursing care in a safe manner in an instructor supervised skills laboratory and real-life patient care settings.
- Collect subjective and objective health assessment data for adult patients in an acute care setting.
- Apply the nursing process as a method for clinical reasoning and decision making.
- Demonstrate accurate calculation and administration of medication dosages including intravenous therapy.
- Demonstrate accurate and complete documentation of patient care in the DocuCare electronic medical record.
- Demonstrate the following procedures according to best practices and evidenced based research: Medication Administration, Skin Integrity and Wound Care, Comfort and Pain Management, Nutrition, Urinary Elimination, Bowel Elimination, Oxygenation: suctioning, Cardiovascular, Fluid, Electrolyte, and Acid-Base Balance, and Laboratory Specimen collection.
- Apply the nursing process to patients experiencing pain, fluid and electrolyte imbalance, surgery, and

disorders of gas exchange, digestion, renal, sensory, and integumentary dysfunction.

- Implement safe, effective nursing care for patients with pain, fluid and electrolyte imbalance, perioperative needs, and disorders of gas exchange, digestion, renal, sensory, and integumentary dysfunction through the nursing roles of practitioner, educator, advocate, and researcher.
- Demonstrate nursing interventions to promote basic needs including activity and exercise; patient safety; hygiene; oxygenation, fluid, electrolyte and acid base balance; sleep; pain management; nutrition; urinary elimination; bowel elimination; skin integrity and wound care; and sensory alterations.

NURS 3270 CULTURAL DIVERSITY & HEALTH 30/0/0 2.0

This course focuses on the role of the nurse to address the needs of clients in diverse populations across the life span. Theory and research-based evidence from nursing and other disciplines are integrated with concepts of caring and cultural competencies. Concepts such as cultural awareness, readiness, sensitivity, and cultural education will be emphasized. In partnership with clients, the student develops, implements, and evaluates a cultural teaching plan designed to produce a desired change in behavior.

Upon completion of this course, students will be able to describe influences that affect culturally competent healthcare; describe how diversity affects health and illness care, including culturally based traditional care; and describe cultural competence when assessing and providing nursing care for patients from diverse cultural groups.

NURS 3384 NURSING RESEARCH 30/0/0 2.0

This course helps students learn how to read and critique research reports and to develop an appreciation of research as a path to enhancing nursing practice.

Upon completion of this course, students will be able to discuss the need for evidence-based practice, compare quantitative research with qualitative research. Identify the components of a well-worded clinical question and be able to frame such a question. Students will also be able to describe the flow and sequence of activities in quantitative and qualitative research, discuss why they differ, and describe aspects of a research critique. Students will also be able to describe the process of developing and refining a research problem and understand the process of screening, abstracting, critiquing, and organizing research evidence. Students will be required to describe approaches for assessing the reliability and validity of measures, and critique researchers' interpretation of their results in a discussion section of a report.

NURS 3340 MEDICAL SURGICAL NURSING II 45/0/0 3.0

This course provides an understanding of the nurse's role in patient-centered care within evolving practice environments and across the spectrum of health and illness. This course will address nursing care issues including cancer care; end-of-life care; hematologic; immunologic; musculoskeletal; metabolic; endocrine; and reproductive function from a physiologic, pathophysiologic, and psychosocial context. Students will apply this knowledge through the nursing process and clinical reasoning in an acute care clinical setting as they assume the roles of practitioner, educator, advocate and researcher through the NURS 3440L Medical Surgical Nursing II Lab/Clinical course.

Upon completion of this course, students will be able to discuss end-of-life issues and care as they relate to professional nursing practice. They will be able to demonstrate a comprehensive understanding of cancer, hematologic, immunologic, musculoskeletal, metabolic, endocrine, and reproductive function, and apply the nursing process to patients experiencing cancer, hematologic, immunologic, musculoskeletal, metabolic, endocrine, and reproductive dysfunction. Students will also be able to describe safe, effective nursing care for patients with cancer, hematologic, immunologic, musculoskeletal, metabolic, endocrine, and reproductive dysfunction through the nursing roles of practitioner, educator, advocate, and researcher. **Semester five courses must be completed as prerequisites to this course**

NURS 3440L MEDICAL SURGICAL NURSING II LAB/CLINIC 30/30/60 4.0

This course provides an opportunity for students to apply their growing knowledge base of adult medical surgical conditions through the nursing process and clinical reasoning in an acute care clinical setting as they assume the roles of practitioner, educator, advocate, and researcher.

Upon completion of this course, students will be able to demonstrate nursing care in a safe manner in an instructor supervised real life patient care setting. Students will be able to collect subjective and objective health assessment data for adult patients in an acute care setting and apply the nursing process as a method for clinical reasoning and decision making. They will be able to demonstrate accurate calculation and administration of medication dosages, to include intravenous therapy, and demonstrate accurate and complete documentation of patient care.

Students will demonstrate all procedures learned in previous semesters according to best practices and evidenced based research. Students will apply the nursing process to patients experiencing cancer, hematologic, immunologic, musculoskeletal, metabolic, endocrine, and reproductive dysfunction. Students will implement safe, effective nursing care for patients with cancer, hematologic, immunologic, musculoskeletal, metabolic, endocrine, and reproductive dysfunction through the nursing roles of practitioner, educator, advocate, and researcher. Lastly, students will demonstrate nursing interventions to promote basic needs including activity and exercise; patient safety; hygiene; oxygenation, fluid, electrolyte and acid base balance; sleep; pain management; nutrition; urinary elimination; bowel elimination; skin integrity and wound care; and sensory alterations. **Semester five courses must be completed as prerequisites to this course**

NURS 3250 MENTAL HEALTH 30/0/0 2.0

This course provides a foundation for the nurse's role in mental health care. This course will present sound nursing theory, therapeutic modalities, and clinical applications across the treatment continuum and in various clinical settings using a nursing process framework. Students will apply this knowledge through the nursing process and clinical reasoning in an inpatient psychiatric clinical setting as they assume the roles of practitioner, educator, advocate, and researcher through NUR3150L Mental Health Lab/Clinical.

Upon completion of this course, students will be able to discuss current trends in the treatment of people with mental illness and discuss neuro-biologic theories and medication management for patients with mental illness. They will be able to explain the basic beliefs and approaches of the contemporary psychosocial theories of mental illness and describe different types of residential and community treatment settings and the services they provide. Students will be able to demonstrate effective therapeutic responses to simulated client situations and obtain and organize psychosocial assessment data to use as a basis for planning nursing care. They will also be able to identify legal and ethical issues in the practice of psychiatric nursing and apply the nursing process to the care of clients. **Semester five courses must be completed as prerequisites to this course.**

NURS 3150L MENTAL HEALTH LAB/CLINICAL 6/12/12 1.0

This course emphasizes safe, effective, compassionate patient care as nursing students learn to incorporate cognitive, technical, interpersonal, and ethical/legal aspects of nursing care to patients with mental health disorders. Students will use therapeutic communication and evidence-based interventions as they apply the nursing process to deliver holistic care in an in-patient mental health clinical setting through the roles of practitioner, educator, advocate, and researcher.

Upon completion of this course, students will be able to demonstrate nursing care in a safe manner to patients in an instructor-supervised patient care setting. Students will collect subjective and objective data from patients in a residential psychiatric care setting. Students will also be required to use effective communication with patients, instructors, and peers, while demonstrating accurate and complete documentation of patient care. Lastly, students will apply the nursing process to the care of clients experiencing grief and loss; anger, hostility, and aggression; abuse and violence; and psychiatric disorders including trauma and stressor-related,

anxiety, obsessive- compulsive, schizophrenia, mood, suicidal ideations; personality, addiction, and eating disorders; somatic, neurodevelopmental, disruptive behavior, and cognitive disorders. **Semester five courses must be completed as prerequisites to this course.**

NURS 3320 COMMUNITY HEALTH NURSING 30/6/24 2.5

This course focuses on evidence-based practice in community and public health nursing by blending the nursing process and the epidemiologic process to provide a framework for gathering evidence about health problems, analyzing the information, generating diagnoses or hypotheses, planning for resolution, implementing plans of action, and evaluating the results. Students will understand the nurse's role as a change agent and leader in implementing culturally appropriate, community- based programs to remedy the conditions that contribute to health disparities. The five common specialty practices of mental health, school health, faith-oriented communities, palliative care, and occupational health nursing are explored.

Upon completion of this course, students will be able to discuss the challenges for public health nurses in the 21st century to include infectious and communicable diseases, emerging infectious diseases, violence and abuse, substance use, underserved populations, environmental health, and community preparedness for disaster and terrorism. Students will be able to describe the structure of public healthcare in the United States and discuss the role of nurses in informing healthcare policies. They will describe key indicators of health that can be measured or used as benchmarks to examine the health outcomes of a population. Furthermore, students will be required to identify epidemiologic and health behavior change models of health promotion and modifiable risk reduction and generate research questions related to problems identified in community and public health nursing practice. **Semester five courses must be completed as prerequisites to this course**

N**URS 4370 MEDICAL SURGICAL NURSING III 45/0/0 3.0**

This course provides an understanding of the nurse's role in patient-centered care within evolving practice environments and across the spectrum of health and illness. This course will address nursing care issues including shock; multiple organ dysfunction; trauma; cardiovascular disease; circulation; burns; neurologic; and emergencies from a physiologic, pathophysiologic, and psychosocial context. Students will apply this knowledge through the nursing process and clinical reasoning in an acute care clinical setting caring for high acuity patients as they assume the roles of practitioner, educator, advocate and researcher in the NURS 4370L Medical Surgical Nursing III Lab/Clinical.

Upon completion of this course, students will be able to demonstrate a comprehensive understanding of shock, multiple organ dysfunction, trauma, cardiovascular disease, circulation, burns, and neurologic function. They will be able to describe the nursing process for patients experiencing emergencies, shock, multiple organ dysfunction, trauma, cardiovascular disease, circulation, burns, and neurologic dysfunction. Furthermore, students will be able to discuss safe, effective nursing care for patients with emergencies, shock, multiple organ dysfunction, trauma, cardiovascular disease, circulation, burns, and neurologic dysfunction through the nursing roles of practitioner, educator, advocate, and researcher. **Semester six courses must be completed as prerequisites to this course**.

NURS 4370L MEDICAL SURGICAL NURSING III LAB/CLINICAL 30/30/60 4.0

This course provides an opportunity for students to apply their growing knowledge base of adult medical surgical conditions through the nursing process and clinical reasoning in an acute care clinical setting for high acuity patients as they assume the roles of practitioner, educator, advocate and researcher.

Upon completion of this course, students will be able to demonstrate nursing care in a safe manner in an instructor supervised real life patient care setting and collect subjective and objective health assessment data from adult patients in an acute care setting. They will apply the nursing process as a method for clinical reasoning and decision making. They will be able to demonstrate accurate calculation and administration of

medication dosages including intravenous therapy and demonstrate accurate and complete documentation of patientcare.. Where opportunities are available in the real- life patient setting, they will be able to demonstrate all procedures learned in previous semesters according to best practices and evidenced based research, and apply the nursing process to patients experiencing emergencies, shock, multiple organ dysfunction, trauma, cardiovascular disease, circulation, burns, and neurologic dysfunction.

Students will further implement safe, effective nursing care for patients with emergencies, shock, multiple organ dysfunction, trauma, cardiovascular disease, circulation, burns, and neurologic dysfunction through the nursing roles of practitioner, educator, advocate, and researcher. Lastly, students will be able to demonstrate nursing interventions to promote basic needs including activity and exercise; patient safety; hygiene; oxygenation, fluid, electrolyte and acid base balance; sleep; pain management; nutrition; urinary elimination; bowel elimination; skin integrity and wound care; and sensory alterations. **Semester six courses must be completed as prerequisites to this course.**

NURS 4460 MATERNAL CHILD NURSING 60/0/0 4.0

This course focuses on evidence-based practice and family-centered care in maternity and pediatric nursing. The topics of pregnancy, labor, and birth, postpartum, newborn, growth, and development of the well child from newborn through adolescence, health promotion for well children as well as care of the child with a health disorder are explored. Students apply the knowledge in acute care hospital clinical units during NUR4460L Maternal Child Nursing Lab/Clinical.

Upon completion of this course, students will be able to examine the major components and key elements of family-centered care and describe maternal physiologic changes that occur during pregnancy, to include nursing management to promote maternal self-care and to manage high-risk pregnancy. Students will be able to explain the tests used to assess maternal and fetal well-being, including nursing management for each, summarize the nursing care throughout the labor and birth process, and plan postpartum nursing care with interventions to reduce common postpartum complications and foster maternal/infant bonding. Students will be required to discuss the areas of health education needed for discharge planning, home care, and follow-up, and describe a nursing care plan to address common issues related to growth and development from newborn through adolescence. Lastly, students will apply the nursing process to the care of children with special needs and health disorders affecting each body system. Identify appropriate nursing assessments and interventions for the child with a mental health disorder. **Semester six courses must be completed as prerequisites to this course**.

N**URS 4460L MATERNAL CHILD NURSING LAB/CLINICAL 16/0/44 2.0**

This course focuses on evidence-based practice and family-centered care in maternity and pediatric nursing. Nursing skills for maternal, newborn, and childcare are included in the laboratory component. Students apply the knowledge in acute care hospital labor and delivery, postpartum, newborn nursery, and pediatric clinical units. Upon completion of this course, students will be able to demonstrate nursing care in a safe manner in an instructor supervised skills laboratory and real-life patient care settings and collect subjective and objective health assessment data for women, infants, and children in an acute care setting. They will apply the nursing process to a client in labor as a method for clinical reasoning and decision making, demonstrate postpartum nursing care with interventions to reduce common postpartum complications and foster maternal/infant bonding, and demonstrate health education to parents for discharge planning, home care, and follow- up. Students will implement a nursing care plan to address common issues related to growth and development for the newborn through adolescence.

Students will be able to apply the nursing process to the care of children with special needs and health disorders affecting each body system, demonstrate care of the normal newborn, and use effective communication with patients, instructors, and peers. Students are expected to demonstrate accurate calculation and administration of medication dosages including intravenous therapy and demonstrate accurate and

complete documentation of patient care. **Semester six courses must be completed as prerequisites to this course.**

In a simulated laboratory setting and where opportunities are available in a real-life patient setting, students will demonstrate the following procedures according to best practices and evidenced based research:

- Assessment: Maternal, newborn, and pediatric.
- Antepartum Care: vaginal exam, administration of RhoGAM.
- Intrapartum Care: Assisting with amniotomy; auscultating fetal heart rate, external and internal electronic fetal monitoring, monitoring a patient undergoing induction of labor, caring for a patient with an epidural.
- Postpartum Care: assessing the perineum, assessing the uterine fundus following birth, evaluating lochia, and assisting with breast feeding.
- Newborn Care: APGAR scores, thermoregulation, applying, caring for, and removing an umbilical cord clamp, assisting with circumcision, providing circumcision care, initial newborn bath, and phototherapy for the infant.
- Medication Administration and Calculation: adults, infants, and children and demonstrate nursing interventions for women, infants and children to promote basic needs including activity and exercise; patient safety; hygiene; oxygenation, fluid, electrolyte and acid base balance; sleep; pain management; nutrition; urinary elimination; bowel elimination; skin integrity and wound care; and sensory alterations.

NURS 4410 NURSING LEADERSHIP & MANAGEMENT 45/30/15 4.0

This course allows the student to explore management topics while building effective leadership skills, so they may function effectively in the rapidly changing health-care industry. Students will delve into management and leadership issues such as operational planning, planned change, time management, professional advocacy, staffing, motivating, delegation, quality control and conflict resolution are discussed, and will apply this knowledge through the nursing process and clinical reasoning in an acute care clinical setting as they develop their professional role of leader and manager.

Upon completion of this course, students will be able to differentiate between leadership roles and management functions, and analyze how current and future paradigm shifts in healthcare may affect the leadership skills needed by nurses in the 21st century. They will be able to discuss ethical decision making congruent with the ANA Code of Ethics and Interpretive Statements and professional standards and differentiate between the manager's responsibility to advocate for patients, subordinates, the organization, the profession, and for self. Students will develop a time management tool to complete nursing care according to the priority level they have been assigned. Students will also recognize, and problem solve budgetary constraints and be able to describe characteristics of magnet designated health-care organizations that exemplify the 14 forces of magnetism. Students will also be able to differentiate among various types of patient care delivery systems and address the unique challenges of building a cohesive team through education and socialization when a diverse workforce exists. Lastly, students will be able to select appropriate staffing policies for a given situation, determine whether delegation to an unlicensed worker is appropriate in each situation and use a decision tree developed by the NCSBN and/or TBON. **Semester seven courses must be completed as prerequisites to this course.**

NURS 4250 PROFESSIONAL NURSING ISSUES 30/0/0 2.0

This course provides an overview of significant issues that impact the nursing profession. Both enduring professional issues and the most pressing contemporary issues facing the profession are explored, to include furthering the profession, issues of the workforce, workplace, nursing education, and legal and ethical issues, and professional power.

Upon completion of this course, students will be able to analyze the potential impacts of raising the educational entry level on the current nursing shortage, workforce diversity, and intra-professional conflict. Describe the driving and restraining forces for increasing the entry educational level for advanced practice nursing to that

of a practice doctorate. Evaluate strategies directed at both supply and demand factors that have been proposed to reduce the current nursing shortage. Integrate ethical, legal, and human rights as guides for developing best practices to guard against and respond to workplace violence. Analyze how social media can be effectively used by professional nurses. Identify at least three models of transition to practice programs. Discuss consequences of a lack of academic integrity in nursing programs. Compare continuing education requirements for nurses with those for other health care professionals. Identify issues currently being debated in the legislature that affect nursing and health care. Explore the roles and responsibilities that individual nurses, employers, professional associations, and the media must ensure that nurses are portrayed accurately and positively to the public. Describe types of nursing associations and their value to members and the profession.

NURS 4380 PRECEPTORSHIP + LAB/CLINICAL 0/10/80 2.0

This course builds on the knowledge and skills obtained in the nursing curriculum and integrates the curriculum concepts in varied/diverse practice settings. Synthesis of management, organizational culture and interpersonal relationship principles are applied with developing independence in the practice of nursing. This course facilitates the students' evaluation of principles and practices of the profession of nursing while assisting in the role transition to a practicing registered nurse. Clinical environments could be, but are not limited to, medical/surgical, mental health, pediatric, maternity, critical care, home, nursing home and extended or ambulatory care units.

Upon completion of this course, the students will be able to deliver holistic nursing care to groups of patients consistent with the job description for a registered nurse in the assigned clinical practice setting and apply the nursing process and critical thinking skills when implementing safe, appropriate, and caring interventions within the professional nursing scope of practice. Students will be able to demonstrate effective management of both the patients and staff through collaboration and delegation and evaluate how the organizational design and culture of the health care system affects the delivery of nursing care. Lastly, students will be able to demonstrate professional communication techniques when interacting with staff, patients, and families and evaluate the legal and ethical aspects of the professional nursing role in the assigned clinical practice setting. Students will use standards of practice to evaluate care administered by the interdisciplinary health care team, as they participate in coordination of patient transfer to and from the assigned clinical practice unit and/or setting. **Semester seven courses must be completed as prerequisites to this course.**

NURS 4390 NURSING CAPSTONE 45/0/0 3.0

This course prepares students to transition to the professional nursing role as an entry-level registered nurse. Students will understand the importance of effective inter- and intra-professional communication and work dynamics, the employment process, career development, nursing jurisprudence related to the provision of safe and effective nursing care, and preparation for the NCLEX-RN examination.

Upon completion of this course, students will be able to identify individual nursing content areas of mastery and weakness and develop an individualized study plan for the NCLEX-RN. Students will be required to discuss differentiated practice as it applies to Texas Board of Nursing educational outcomes for graduates of Texas nursing programs, and explain the competencies needed by the new graduate as outlined by the job analysis study that is the basis for the NCLEX-RN. They will meet the Texas Board of Nursing criteria for successful completion of the Texas Nursing Jurisprudence examination. Lastly, students will demonstrate a variety of communication modes for effective organizational communication and describe group dynamics and roles to facilitate communication and productivity. **Semester seven courses must be completed as prerequisites to this course.**

NOTE: ENGL 1301, PHIL 1301, HIST 1301, MATH 1312, SPCH 1315, PSYC 2301, ENGL 1302, and MATH 1342 all include 45 hours of lecture and have the same course descriptions and credit values as the courses listed with the same course codes in the General Education Section.

TECHNICAL MANAGEMENT (Completion Program)
100% Online (Branch Campus program)

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Career Opportunities in Technical Management

The Bachelor of Science in Technical Management completion program is designed for individuals who already hold an associate degree and wish to move upward in an organization to qualify for supervisory and administrative positions. Common roles include business manager, general manager, sales manager, project manager, project coordinator, logistics clerk, technical manager, supervisors of administrative support teams, operations coordinators, and office managers. From 2023 to 2033, job openings in related administrative and support roles remain strong, particularly in office administrative services and higher education. Texas is expected to see a 53.9% increase in related technical management roles, while national employment is projected to grow by 14.3%. In May 2024, median wages for supervisory positions in office and administrative support occupations ranged from $54,000 to $75,000 depending on industry and experience.(Source: D.O.L. Occupational Outlook Handbook, 2023-2033 Edition).

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	2,267
Projected Employment 2035	2,611
Average Hourly Wage 2024	$30.52
Average Annual Openings	231
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

TECHNICAL MANAGEMENT
COURSES 1-20
960 CLOCK HOURS
60.0 SEMESTER CREDIT UNITS

Educational Objectives

The Bachelor of Science in Technical Management completion program will help students learn to cultivate a variety of skills and assets needed by businesses. The program will provide students with the knowledge and leadership skills needed for positions in business and may also provide students with opportunities for career advancement. The program provides training in a variety of courses to include Accounting, Principles of Lean Six Sigma, Project Management, Operations, among others. It will also provide hands-on experience in Microsoft Word and Excel. This program provides General Education, technical, and specialized courses that will prepare the graduate for careers in private, public, and government sectors.

Technical Standards and Essential Functions

WTC's Bachelor of Science in Technical Management completion program is an online program. It has established technical standards and essential functions for the program as more fully listed below. The ability to meet these standards and essential functions, with or without reasonable accommodation, is required in order to complete the program satisfactorily. Please review the following technical standards and essential functions carefully.

1. The ability to always maintain a professional demeanor and interact professionally with fellow students, administration and faculty.
2. The ability to listen, understand, and communicate ideas presented through spoken words and sentences.
3. The ability to match or detect differences between colors, including shades of color and brightness.
4. The ability to work with others in a team environment.
5. The ability to utilize computers and perform basic computer functions with programs such as Word, Outlook, and Excel.
6. Strong problem solving, communication and analytical skills

WTC does not discriminate in admission or access to programs on the basis of any characteristic protected by law, including disability. Persons with disabilities are eligible for admission, as long as, they can carry out classroom, laboratory and internship assignments; pass written, oral and practical examinations; and meet all of the requirements of the program and generally accepted requirements of the profession, with or without reasonable accommodation. WTC will make reasonable accommodations for disabilities. Applicants and students who require accommodation should contact the campus president and submit a written request for accommodation.

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

TECHNICAL MANAGEMENT

#	Course	Title	Hours	Theory/Lab	% Online	TWC/ THECB SCU	ACCSC SCH
1	BMGT 3300	Business Practices	48	48/0	100%	3.0	3.0
2	PSYC 3648	Organizational Psychology (Gen Ed)	48	48/0	100%	3.0	3.0
3	BMGT 3327	Management Practices	48	48/0	100%	3.0	3.0
4	HRPO 3301	HR Management	48	48/0	100%	3.0	3.0
5	ENGL 3302	Technical Writing (Gen Ed)	48	48/0	100%	3.0	3.0
6	IBUS 3300	Logistics Management	48	48/0	100%	3.0	3.0
7	MATH 3342	Statistics (Gen Ed)	48	48/0	100%	3.0	3.0
8	ACNT 3525	Accounting for Managers	48	48/0	100%	3.0	3.0
9	MKTG 3311	Sales and Marketing	48	48/0	100%	3.0	3.0
10	PHIL 3302	Ethics (Gen Ed)	48	48/0	100%	3.0	3.0
11	FINA 3315	Business Finance	48	48/0	100%	3.0	3.0
12	LSSY 3310	Principles of Lean Six Sigma	48	48/0	100%	3.0	3.0
13	POLS 3303	American Government and Politics (Gen Ed)	48	48/0	100%	3.0	3.0

14	BMGT 3322	Service Operations Management	48	48/0	100%	3.0	3.0
15	BMGT 4302	HR Development	48	48/0	100%	3.0	3.0
16	BMGT 4301	Project Management	48	48/0	100%	3.0	3.0
17	BMGT 4322	Production/Operation Management	48	48/0	100%	3.0	3.0
18	BCIS 4312	Management Information	48	48/0	100%	3.0	3.0
19	BMGT 4388	Professional Issues	48	48/0	100%	3.0	3.0
20	BMGT 4300	Capstone	48	48/0	100%	3.0	3.0
Total Hours - Bachelor of Science in Technical Management (completion program)			**960**	**960/0**		**60.0**	**60.0**

Note: Associate of Applied Science (AAS) graduates (or equivalent) may be eligible for up to 60.0 transfer credits. Prospects with an earned Associate of Occupational Studies (AOS) degree would be eligible for up to 45 transfer credits. Applied general education courses are non-transferable, therefore, students will be required to complete up to 15.0 semester credits of general education courses as part of their program in BSTM.

TECHNICAL MANAGEMENT COURSE DESCRIPTIONS

BMGT 3300 BUSINESS PRACTICES 48/0/3.0

Topics such as business environment, management, organization, marketing, finance, accounting, and data processing are discussed, among other business topics. Upon completion of this course, the student will be able to demonstrate an understanding of the major functions of business including management, accounting/finance, marketing, investments, and information technology; present major business concepts in writing and orally using proper business communication techniques; explain why business ethics is an integral part of every business organization.

BMGT 3327 MANAGEMENT PRACTICES 48/0/3.0

This course will help students will learn to apply management concepts about decision making, foundations of planning, managing change, effective communication, operations management, and team building. Upon completion of this course, the student will be able to do the following:

1. Identify management, organizational structure, and operations management
2. Describe globalization's affects on business organizations
3. Apply the foundations of decision making
4. Understand the foundations of human behavior as they apply to motivating and rewarding employees
5. Demonstrate how to manage communication and information

HRPO 3301 HUMAN RESOURCES MANAGEMENT 48/0/3.0

This course provides an in-depth study of personnel management or human resource management. It includes the process of acquiring, training, appraising, and compensating employees and of attending to their labor relations, health and safety, and fairness concerns. Upon completion of this course, the student will be able to do the following:

1. Explain why human resource management is important to all managers and describe the trends that are influencing it.
2. Summarize the basic equal employment opportunity laws and how each impacts HR functions such as recruitment and selection
3. Explain the basic defenses against discrimination allegations and provide examples of what employers can

and cannot legally do with respect to recruitment, selection, and promotion and layoff practices
4. Write job descriptions, including summaries and job functions, using the Internet and traditional methods
5. Explain and give examples of the need for branding in effective recruiting
6. Explain how to do a background check on job candidates
7. List and explain the five steps in the training process and the pros and cons of at least eight performance appraisal methods

IBUS 3300 LOGISTICS MANAGEMENT 48/0/3.0

This course will have students explore logistics and all of its components. Those include financial logistics, inventory management logistics, warehouse management logistics, packing and materials handling logistics, and transportation logistics. The course will also address the ways in which technology affects the overall environment of logistics, organizational and managerial issues in logistics, the importance of facility location, and transportation infrastructures.

Upon completion of this course, the student will be able to describe a supply chain and define supply chain management; Explain the importance of logistic management and supplier partnership; Explain the role of demand forecasting; Compare and contrast the various modes of transportation and their impacts on cost; explain the causes of the bullwhip effect and how they impact process.

ACNT 3525 ACCOUNTING FOR MANAGERS 48/0/3.0

Upon completion of this course, the student will be able to examine income statements, statements of retained earnings, and balance sheets; explain assets, liabilities, and owner's equity; explain the importance of financial statements; use revenue and expense accounts; use the General Ledger; explain how financial statements are used to analyze a business; perform a horizontal and vertical analysis of financial statements; calculate and explain financial ratios; and analyze financial statements for decision makers.

MRKG 3311 SALES AND MARKETING 48/0/3.0

Upon completion of this course, the student will be able to explain how current developments in marketing create the challenges of marketing activities; trace the facets of sales management, including estimating sales potential and forecasting sales, manning territories, selecting, training, motivating, supervising and compensating the sales force, and interfacing with other company functions; explain the marketplace and customers and identify the five core marketplace concepts; describe customer relationship management and identify strategies for creating value for customers and capturing value from customers in return plan, price, promote and distribute products and services to present and potential customers; create business portfolios, develop growth strategies, and describe how companies analyze and use marketing information; define the major types of buying decision behavior and the stages in the buyer decision process; delineate the major steps in designing a customer-driven marketing strategy: market segmentation, targeting, differentiation, and positioning; describe ways in which companies find and develop new-product ideas; identify the three major pricing strategies and discuss the importance of understanding customer-value perceptions, company costs, and competitor strategies when setting prices; and
explain the need to understand competitors as well as customers through competitor analysis.

FINA 3315 BUSINESS FINANCE 48/0/3.0

Upon completion of this course, students will be able to apply the business finance principles that support the overall financial strategy of an organization; apply the standard and accepted accounting principles when reporting, recording, and projecting financial information; explain the structure of financial statements; use the time value of money and financial return and risk concepts to conduct professional financial analyses;

identify the primary determinants of market interest rates; and describe the responses to changes to those rates in terms of supply and demand for loanable funds.

LSSY 3310 PRINCIPLES OF LEAN SIX SIGMA 48/0/3.0

Upon completion of this course, students will be able to explain the role of a Lean Six Sigma (LSS) Yellow Belt within an organization; participate as a project team member; review process improvements that support the project; explain process concepts and variation; work with LSS metrics; explain how LSS can lead to increases in performance and decreases in process variation that can lead to defect reduction and improvement in profits, employee morale, and quality of products or services; describe how to use the LSS approach, its tools and methodologies; and demonstrate the skills necessary to identify, monitor, and control "profit-eating" practices in a process.

BMGT 3322 SERVICE OPERATION MANAGEMENT 48/0/3.0

Upon completion of this course, the student will be able to use strategic and tactical aspects of managing the operations, marketing, and human resources functions to control resources and deliver services to customers; execute service models that enable customers, employees, and owners to thrive simultaneously; productively leverage data and analytics; adapt to evolving customer needs and changing competitive landscapes; and explore challenges faced by service operations managers, customer expectations.

BMGT 4302 HR MANAGEMENT DEVELOPMENT 48/0/3.0

Upon completion of the course students will be able to explain Human Resource Development (HRD) and the need for HRD; design, implement, and evaluate HRD programs; coach employees and manage their performance;
provide employee counseling, well-being, and wellness; and guide employees through career management and development.

BMGT 4322 PRODUCTION/OPERATION MANAGEMENT 48/0/3.0

Upon completion of this course, students will be able to identify product and process designs; implement productivity improvement and explain Total Quality Management; trace the steps in new product development and apply forecasting methods and capacity planning measures; describe the functional areas of production and operations management in the manufacturing industry; use decision-making skills in capacity, aggregate, and distribution planning; practice forecasting; explain inventory management; identify materials requirements in planning (MRP), project management, and quality control.

BCIS 4312 MANAGEMENT INFORMATION SYSTEMS 48/0/3.0

Upon completion of this course, students will be able to explain how information systems can give a business a competitive edge; explain how information systems help managers plan strategies, control events, and make decisions; use e-business concepts; evaluate the role of the major types of information systems in a business environment and their relationship to one another; assess the impact of the internet on business electronic commerce and electronic business; identify the major management challenges to building and using information systems and be able to find appropriate solutions to those challenges; describe an IT infrastructure and its components; describe the core activities in the systems development process; and cultivate skills and experience in the development and implementation of information systems projects

BMGT 4388 PROFESSIONAL ISSUES 48/0/3.0

Upon completion of this course, students will be able to articulate their responsibilities as business professionals;

apply ethical frameworks and critical thinking skills to management-related scenarios; create, analyze, and critique arguments surrounding social and ethical aspects of management; discuss concerns about the social and ethical aspects of management; develop strategies for decision-making for management ethics issues; and improve their ethical, analytical, discussion, leadership, speaking, and writing skills.

BMGT4300 CAPSTONE 48/0/3.0

Upon completion of this course students will be able to develop a detailed project proposal and complete a final capstone project linking the areas of study of the student's BS degree plan with intellectual interests. The final written project will consist of research, reviews, and analysis targeted towards a specified audience. A presentation and submission of the project is required. Upon completion of this course, the student will be able to:

1. Explain the strategy of making process, and their Capstone will identify stakeholders, the mission, governance, and business ethics
2. Conduct an external analysis (the identification of opportunities and threats) to build competitive advantage
3. Propose strategic changes (implementing strategies to build and develop a company)

Prerequisites: All preceding courses

M A S T E R D E G R E E

MASTER OF BUSINESS ADMINISTRATION

100% online (Branch Campus program)

Current or former employees, stock footage, and/or paid talent are portrayed in these images

Career Opportunities in Business Administration

The Master of Business Administration (MBA) program prepares graduates for advanced leadership roles across a broad spectrum of industries. Management professionals, including operations managers, department heads, and corporate executives—play a critical role in organizational success. From 2023 to 2033, approximately 963,500 job openings are projected annually. Career opportunities include but are not limited to management, finance, accountants, auditors, general and operations Managers, sales representatives and sales managers, financial analysts, and human resources managers and compliance officers. Texas anticipates a 29.7% increase in management-related jobs. In May 2024, the median wage for professionals in related business management occupations averaged $80,920, reflecting continued demand for skilled business leaders.

Labor Market Information (2024 thru 2035 Projections)	Texas
Labor Market Information Employment 2024	2,267
Projected Employment 2035	2,611
Average Hourly Wage 2024	$30.52
Average Annual Openings	231
Source: 2025 Workforce Solutions Targeted Occupations List, Texas, Rio Grande Valley	

MASTER OF BUSINESS ADMINISTRATION

COURSES 1-12
576 CLOCK HOURS
36.0 SEMESTER CREDIT HOURS

Mission Statement

The mission of the program is to develop critical thinkers, problem solvers, and skilled leaders to transform the business world.

Educational Objectives

The Master of Business Administration program will help students cultivate a variety of skills and assets needed by business leaders and managers, skills and assets that may also prepare students for career advancement. The program aims to develop leaders who synthesize and communicate ideas effectively and analyze and integrate innovative and credible solutions to organizational problems.

Technical Standards and Essential Functions

Students entering this program must be able to meet these standards and perform essential functions with or without reasonable accommodations to complete this program successfully.

1. The ability to understand course materials and maintain a grade/performance level that meets the set academic requirements.
2. The ability to maintain a professional demeanor and interact professionally with fellow students, employees, administration, and faculty.
3. The ability to listen, understand, and communicate ideas presented through oral and written communication.
4. The ability to work with others in a team environment.
5. The ability to respect instructors and classmates.
6. The ability to utilize computers and perform basic computer functions with programs such as Word, Outlook, and Excel.
7. Must be able to utilize E-books.
8. Strong problem solving, communication and analytical skills

Note: The sequential order of the classes may differ from that included in the program outline below. Courses with prerequisites are denoted in the course outline with an asterisk (*).

MASTER OF BUSINESS ADMINISTRATION

#	Course	Title	Hrs.	Theory/ Lab	% Online	Semester Credit Hours
1	MGMT 5301	Leadership	48	48/0	100%	3.0
2	ACCT 5311	Accounting for Decision Makers	48	48/0	100%	3.0
3	MGMT 5309	Data-Driven Decision Making	48	48/0	100%	3.0
4	MRKG 5401	Marketing Management	48	48/0	100%	3.0
5	ECON 5360	Global Economics for Managers	48	48/0	100%	3.0
6	MGMT 5346	Operations Management	48	48/0	100%	3.0
7	FINA 5394	Managerial Finance	48	48/0	100%	3.0
8	MGMT 5336	Managing Human Capital	48	48/0	100%	3.0
9	MGMT 5325	Strategic Management	48	48/0	100%	3.0
10	MGMT 5394	Ethical Leadership	48	48/0	100%	3.0
11	MGMT 5303	Applied Business Research and Statistics	48	48/0	100%	3.0
12	MGMT 5351	Capstone	48	48/0	100%	3.0
Total Hours and Credits – Master of Business Administration			**576**	**576/0**	**100%**	**36.0**

MASTER OF BUSINESS ADMINISTRATION COURSE DESCRIPTIONS

MGMT5301 Leadership 48/0/3.0
Upon completion of this course, students will be able to explain aspects of managing and leading organizations; explain the behaviors and traits of effective managers and leaders; identify relevant current issues in management and leadership; apply personal behaviors and tendencies that impact their leadership style; and demonstrate an ability to motivate individuals and groups to achieve organizational goals.

ACCT5311 Accounting for Decision Makers 48/0/3.0
Upon completion of this course, students will be able to use advanced accounting knowledge and skills to assess and manage a business; ma the accounting cycle, financial statements, taxes, and budgeting; interpret reports and use accounting information to plan and make sound business decisions. explain and analyze actual annual reports and managerial reports; create periodic public filing of financial statements by firms, other corporate disclosures, and analysts' reports; explain the concepts that underlie the preparation of general-purpose cost reports; apply various management accounting techniques to analyze decisions faced by management; and demonstrate an understanding of the role and preparation of budgets.

MGMT5309 Data-Driven Decision Making 48/0/3.0
Upon completion of this course, students will be able to present critical problem-solving methodologies, including field research and data collection methods that enhance organizational performance; apply quantitative analysis, statistical and quality tools; use data to make informed decisions; explain and apply analytics literacy for modern managers and explain the principles of core and state-of-the-art analytics models, when to use each, and how best to communicate their impact on recommendations and decisions; structure complex business problems to leverage analytics when reaching a sound decision; develop innovative frameworks for leveraging data and information to maximize the impact of analytics techniques on the quality of decision-making and ultimately on a business; explain available opportunities in processes, strategies, incentive systems, and marketplace tactics to improve efficiencies, redirect resources, or compete more effectively; and make decisions to implement strategies designed to address those opportunities.

MRKG5401 Marketing Management 48/0/3.0
Upon completion of this course, students will be able to analyze the role of marketing within the firm and society; exercise analytical, communication, and presentation skills; demonstrate ability to comprehend the various aspects of a company's marketing strategy as well as the forces that influence such strategy; demonstrate ability to create a detailed marketing plan and implementation schedule for a company and demonstrate that (a) they can communicate effectively among team members to develop a team-prepared written project and (b) they can make a persuasive, effective presentation of their project;

ECON5360 Global Economics for Managers 48/0/3.0
Upon completion of this course, students will be able to examine how economic tools, techniques, and indicators can be used for solving organizational problems related to competitiveness, productivity, and growth; explore the management implications of a variety of economic concepts and effective strategies to make decisions within a global context; develop a framework for analyzing both opportunities and risks in a global economic environment; evaluate techniques to learn about or increase demand and measure the tradeoffs and suitable applications of each approach; model scenarios and analyze the impact of market changes by constructing supply and demand curves for individuals and markets; identify value creation and decompose its distribution to illustrate how trade occurs; and examine the competitive landscape by differentiating long- and short-run market outcomes and forces.

MGMT5346 Operations Management 48/0/3.0
Upon completion of this course, students will be able to examine managerial concepts and strategies relating to the management of operations in both manufacturing and service environments; discover methods to streamline and drive in efficiencies out of a firm's internal processes to build a highly efficient organization; focus on external processes by examining ways to achieve greater supply chain integration with suppliers and customers; use quantitative and qualitative methods and tools; explain production and operations and management function in any organization; identify various production and operations; design decisions and how they relate to the overall strategies of organizations; explain the relationship of the various planning practices of capacity planning, aggregate planning, project planning and scheduling; and explain the roles of inventories and managing inventories in various demand settings

FINA5394 Managerial Finance 48/0/3.0
Upon completion of this course, students will be able to develop an understanding of the global aspects of business for managers; explain and calculate business financial decisions and forecasting for managers; and demonstrate competence in finance such as working capital, capital budgeting, capital structure, and raising funds in capital markets.

MGMT5336 Managing Human Capital 48/0/3.0
Upon completion of this course, students will be able to construct reasoned arguments using skills appropriate to the context, such as deductive reasoning, scientific inquiry, quantitative reasoning, aesthetic judgment, or critical examination of form, style, content and meaning; explain a local and global context, with diverse human beliefs, abilities, experiences, identities, or cultures; acquire essential knowledge and skills to make well-reasoned judgments personally, professionally, within the business discipline of human resource management and people management in general; and define an organizational structure that drives productivity.

MGMT5325 Strategic Management 48/0/3.0
Upon completion of this course, students will be able to analyze the main structural features of an industry and develop strategies that position the firm most favorably in relation to competition and influence industry structure to enhance industry attractiveness; appraise the resources and capabilities of a firm in terms of the ability to confer sustainable competitive advantage and formulate strategies that leverage a firm's core competencies; explain the concept of competitive advantage and its sources and the ability to recognize it in real-world scenarios; analyze dynamics in competitive rivalry including competitive action and response, first-mover advantage, co-opetition and winner-take-all; and explain the advantages of vertical integration and outsourcing and the factors that determine the relative efficiency of each.

MGMT5394 Ethical Leadership 48/0/3.0
Upon completion of this course, students will be able to explain ethical thinking and problem solving through various philosophical and behavioral views; observe how individuals behave and think when facing ethical dilemmas; explain why ethics are important in every society; analyze leaders' choices and actions; analyze ethical issues in organizational leadership; describe external and internal pressures; discuss organizational choices and implement the leadership concepts in making decisions and designing projects through developing a personal model of ethical leadership.

MGMT5303 Applied Business Research and Statistics 48/0/3.0
Upon completion of this course, students will be able to explain the concepts of descriptive statistics and use sample statistics to make inferences about population characteristics, recognize different models of statistical processes such as hypothesis testing and linear and multiple regression; explain statistical processes and choose which process to use for data analysis applications; interpret statistical results as a basis for decision making, communicating, and interpreting the results of statistical analysis logically and

persuasively in speaking and writing; and collaborate effectively to use statistical analysis to address business challenges.

MGMT5351 Capstone 48/0/3.0

Upon completion of this course, students will be able to demonstrate scholarship and professional competence through effective business-style oral and written communication; compare research collected about industry best practices and a company's current situation; organize, and interpret data to create a plan of action; apply appropriate models from the MBA program while analyzing project objectives to create organization-specific and meaningful observations and conclusions; apply critical thinking and problem-solving skills in the diagnosis and recommendation of solutions for targeted organization problem or opportunity; and use integrated knowledge across business disciplines to define, analyze, and solve business problems.

GENERAL EDUCATION COURSES

MATH COURSES

MATH1312 ALGEBRA 48/0/3.0

Upon completion of this course, students will be able to explain relations and functions, including polynomial, rational, exponential, logarithmic, and special functions; describe systems of equations and their applications; use scientific notation; perform operations on and factor polynomials; graph, solve, and apply linear and quadratic equations; solve systems of linear equations; and analyze functions.

MATH1314 COLLEGE ALGEBRA and TRIGONOMETRY 48/0/3.0

Upon completion of this course, students will be able to explain relations and functions, including polynomial, rational, exponential, logarithmic, and special functions; describe systems of equations, trigonometric functions, and their applications; use scientific notation; perform operations on and factor polynomials; graph, solve, and apply linear and quadratic equations; solve systems of linear equations and analyze functions; and graph and analyze trigonometric functions.

MATH1324 MATHEMATICS FOR BUSINESS and SOCIAL SCIENCES 48/0/3.0

Upon completion of this course, students will be able to explore the concepts and applications for students in business, management, natural and social sciences; apply mathematics concepts involving linear equations, quadratic equations, functions and graphs, inequalities, simple and compound interest, annuities, matrices, and probabilities; set up and solve systems of equations using matrix methods; solve linear applications using geometric and simplex methods; compute probabilities; analyze data using basic principles of statistics; and solve financial applications involving simple and compound interest and annuities. **Prerequisites: MATH 1312 Algebra**

MATH1342 STATISTICS 48/0/3.0

Upon completion of this course, students will be able to collect, analyze, present and interpret data, and probability; analyze descriptive statistics, correlation and regression, confidence intervals and hypothesis testing; use appropriate technology; explain the use of data collection and statistics as tools to reach reasonable conclusions; recognize, examine, and interpret the basic principles of describing and presenting data; examine, analyze and compare various sampling distributions for both discrete and continuous random variables; describe and compute confidence intervals; and perform hypothesis testing using statistical methods. **Prerequisites: MATH 1324 Mathematics for Business and Social Sciences**

MATH 3342 STATISTICS 48/0/3.0

Upon completion of this course, the student will be able to recognize, examine, and interpret the basic principles of describing and presenting data; compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics; explain the role of probability in statistics; examine, analyze, and compare various sampling distributions for both discrete and continuous random variables; describe and compute confidence intervals; and solve linear regression and correlation problems

SCIENCE COURSES

BIOL1401 ANATOMY and PHYSIOLOGY I 45/30/4.0

Upon completion of this course, students will be able to develop a critical understanding of anatomical terminology, anatomical structure, and function of the muscular, endocrine, cardiovascular, immune and lymphatic, digestive, respiratory, urinary, nervous, integumentary, reproduction, and development systems; identify and describe the anatomical terms, directions, planes, axis, and the cavities of the human body; describe basic organization of the human body and its structural levels; describe the atomic, molecular, and cellular structure of human organs; identify the organs of each system, define function and describe their locations and relationships of the parts; and describe human body homeostasis and normal lab values.

BIOL2402 ANATOMY and PHYSIOLOGY II 45/30/4.0

Upon completion of this second part of the Anatomy and Physiology sequence, students will be able to describe the structure and function of the human body, including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous, and special senses; explain the interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis; master a hands-on learning experience for exploring human system components and basic physiology; integumentary, skeletal, muscular, nervous, and special senses; identify and describe the anatomical terms, directions, planes, axis and the cavities of the human body; describe basic organization of the human body and its structural levels; describe the atomic, molecular and cellular structure of human organs; identify the organs of each system, define function and describe their locations and relationships of the parts; and describe human body homeostasis and normal lab values

BIOL2421 MICROBIOLOGY 45/30/4.0

Upon completion of this course, students will be able to describe the principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes; examine the interactions of microbes with one another, hosts, and the environment; demonstrate in laboratory activities the principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbe; explain microbiological processes in detail; appreciate the history, scope, and trends in microbiology; explain the principles and methods of diagnosing disease and epidemiology; and, conduct laboratory practices that include aseptic techniques and appropriate disposal or biological/biohazardous waste.

BIOL1360 INTRODUCTION TO HUMAN NUTRITION 45/0/3.0

Upon completion of this course, students will be able to describe the human nutrition principles that provide an integrated overview of the physiological requirements and functions of protein, energy, and the major vitamins and minerals that are determinants of health and diseases in human populations; describe how to design individualized eating plans; explain the nutritional differences of food and how it affects the body; describe the factors associated with weight control; describe how nutrition and lifestyle choices impact the life cycle before and during pregnancy, during lactation, during infancy, during childhood and adolescence, and through adulthood and aging; and explain the impact of nutrition and lifestyle choices on the immune system and on diseases.

BIOL1301 BIOLOGY FOR NON-SCIENCE MAJORS 48/0/3.0

Upon completion of this course, students will be able to describe the characteristics of biology and the role of science in society; understand the basic principles of biology, including the characteristics of living organisms, the hierarchy of life, and the unity and diversity of life; explain the principles of genetics, including inheritance patterns, DNA structure, and gene expression; understand the scientific method and be able to design and conduct basic biological experiments; discuss the basic structure and function of prokaryotic and eukaryotic cells; and understand evolutionary principles and relationships in biodiversity.

CHEM1470 CHEMISTRY 45/30/4.0

Upon completion of this course, students will be able to explain the basic concepts of chemistry such as systematic treatment of fundamental chemical and physical principles and their applications to the properties and transformations of materials, including the concept of energy and its uses; gas laws, kinetic molecular theory, laws of chemical combination, atomic and molecular structure, periodic classification of the elements; describe chemical bonding;: describe fundamental chemical concepts and principles; solve a wide variety of integrative chemistry problems that connect ideas across topics; and, design, conduct, and analyze experiments pertaining to stoichiometry, thermochemistry, and spectrometry while developing fundamental safety, measurement, and sample isolation techniques.

GEOL1301 GEOLOGY 48/0/3.0

Upon completion of this course, students will be able to explain the materials and processes that have modified and shaped the surface and interior of Earth over time; compare the theories and experimental and geologic data gathered from field observations; describe how the scientific method has led to our current understanding of Earth's structure and processes; interpret the origin and distribution of minerals, rocks, and geologic resources; explain how surface processes are driven by interactions among Earth's systems (e.g., the geosphere, hydrosphere, biosphere, and atmosphere); identify and describe the internal structure and dynamics of Earth; and appreciate the interactions of humans with Earth (e.g., resource development or hazard assessment).

PATHO2330 HUMAN PATHOPHYSIOLOGY 45/0/3.0

Upon completion of this course, students will be able to describe in depth human pathological processes and their effects on homeostasis; apply basic anatomy and physiology, microbiology, and chemistry content acquired in earlier course; describe the etiology, physical signs and symptoms, prognosis, and complications of commonly occurring diseases and their management; utilize medical terminology as it applies to the pathophysiologic basis for alterations in health; demonstrate knowledge of the normal mechanisms of both the normal and altered human body; explain signs and symptoms of diseases and their relationship to specific pathophysiological changes in the human body; describe the relationships between basic pathophysiology and selected diagnostic and therapeutic modalities; and explain the basis for actions that could be taken to avoid pathophysiologic states or conditions or to reduce the risks of occurrence of pathophysiologic states or conditions.

PHYS1401 COLLEGE PHYSICS I 32/64/4.0

Upon completion of this course, students will be able to explain the science of matter and energy and the interactions between them through traditional field dimensions; describe energy and the basics of electricity and electromagnetism; explain units and conversions; explain one- and two-dimensional motion; apply the principles of Newton's Laws; analyze equations of force, work, and energy and apply them; evaluate simple electric circuits using Ohm's Law; and demonstrate theoretical concepts in a laboratory setting.

ENGLISH COURSES

ENGL1301 COMPOSITION I 48/0/3.0

Upon completion of this course, students will be able to focus on the academic essay; use the principles and techniques of expository and persuasive composition, including drafting, revising, and editing in paragraphs and essays; produce a resume; use paragraphs as building blocks of essays; explain the means of persuasion and strategies for evaluating evidence; demonstrate technical writing skills and concise written communication; distinguish among academic writing, writing for work, and informal writing; and write an expository and a persuasive essay.

ENGL1302 RESEARCH ANALYSIS 48/0/3.0

Upon completion of this course, students will be able to practice the strategies and techniques for developing research-based expository and persuasive texts; describe effective and ethical rhetorical inquiry, including primary and secondary research methods; perform critical reading of verbal, visual, and multimedia texts; use systematic evaluation, synthesis, and documentation with information sources; use critical thinking about evidence and conclusions; demonstrate knowledge of individual and collaborative research processes; develop ideas and synthesize primary and secondary sources within focused academic arguments, including one or more research-based essays; analyze, interpret, and evaluate a variety of texts for the ethical and logical uses of evidence; write in a style that clearly communicates meaning, builds credibility, and inspires belief or action; and apply the conventions of style manuals for specific academic disciplines.

ENGL 3302 TECHNICAL WRITING 48/0/3.0

Technical Writing prepares students to design effective technical documents for both written and digital media, with particular emphasis on technical memos, problem-solving and decision-making reports, and organizational, product-support, and technical-information webs. To support these writing tasks, the course provides an introduction to principles of audience analysis, research and documentation, drafting and revision processes, readability and accessibility of written texts, and basic web technologies.

Upon completion of this course, the student will be able to design effective technical documents for both print and digital media; use structures of argument appropriate to technical documents, including problem-solving and decision-making structures; use information designs appropriate to technical documents in digital environments; use a range of current web platforms and technologies; write standard English prose and cite sources in conventional forms and formats.

COMMUNICATION COURSES

SCOM1315 FUNDAMENTALS OF HUMAN COMUNICATION 48/0/3.0

Upon completion of this course, students will be able to describe human communication as a process; explain the principles of interpersonal and small-group presentation skills essential to effective social, business, and professional interaction; examine the role of self-concept, perception, culture, verbal, nonverbal, and written communication; identify the components of communication and its barriers; analyze the audience and describe the criteria for choosing communication media; communicate ethically and avoid potential legal consequences of communication; and, plan, prepare, and deliver a presentation.

SPCH1315 PUBLIC SPEAKING 48/0/3.0

Upon completion of this course, students will be able to plan and deliver several types of speeches appropriate to occasion and audience; discuss clarity of purpose and organization; demonstrate critical thinking and listening skills; identify the means of persuasion; identify the basic elements of the speech process; design messages appropriate to topic, audience, and setting; make best use of strategies, verbal and non-verbal, to assure clear, accurate, and engaging communication; maximize use of language and body for conveying information and convincing argument; and analyze speeches critically for both content and delivery.

SOCIAL SCIENCES COURSES

HIST1301 UNITED STATES HISTORY I 48/0/3.0

Upon completion of this course, students will be able to survey the social, political, economic, cultural, and intellectual history of the United States from the pre- Columbian era to the Civil War/Reconstruction period; describe the pre-Columbian, colonial, revolutionary, and early national periods; explain slavery and sectionalism and the Civil War/Reconstruction eras; trace themes including American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government; create an argument through the use of historical evidence; analyze and interpret primary and secondary sources; and analyze the effects of historical, social, political, economic, cultural, and global forces on this period of United States history.

HIST1302 UNITED STATES HISTORY II 48/0/3.0

Upon completion of this course, students will be able to survey the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present; examine industrialization, immigration, the world wars, the Great Depression, the Cold War, and post-Cold War eras; trace themes in American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and foreign policy; create an argument through the use of historical evidence; analyze and interpret primary and secondary sources; analyze the effects of historical, social, political, economic,

cultural, and global forces on this period of United States history.

PHIL1301 INTRODUCTION TO PHILOSOPHY 48/0/3.0
Upon completion of this course, students will be able to delineate major issues in philosophy and/or the work of major philosophical figures; explain theories of reality, theories of knowledge, theories of value, and their practical applications. read, analyze, and critique philosophical texts; demonstrate knowledge of key concepts, major arguments, problems, and terminology in philosophy; present logically persuasive arguments both orally and in writing; demonstrate critical thinking skills in evaluation and application of philosophical concepts to various aspects of life; and evaluate the personal and social responsibilities of living in a diverse world.

PHIL2225 MEDICAL ETHICS and ISSUES 30/0/2.0
Upon completion of this course, students will be able to explore the major ethical issues confronting the practices of medicine and biomedical science; be familiar with legal and institutional positions; consider and debate opposing arguments on the various topics; and examine relevant case studies.

PHIL 3302 ETHICS 48/0/3.0
Upon completion of this course the student will be able to read, explicate, analyze, and evaluate philosophical literature from the classical philosophers; examine contemporary moral problems that relate to human rights, animal rights, and environmental ethics; write and express themselves well in writing about their own ethical positions; and think critically and analytically about ethical issues.

POLS3389 POLICY and POLITICS IN HEALTHCARE 45/0/3.0
Upon completion of this course, students will be able to be able describe the actors, processes, and institutions that make up the political system in Texas, with emphasis on applied knowledge; describe how politics in Texas shape the operation of Texas political institutions, with attention to the interplay among public opinion, conflict among elites, and the policy environment in the state; explain the history, goals, purpose, components, and dynamics of the health care system in the U.S.; discuss the connections and interconnections among the components of the health care system; and use the facts and perspectives gained through this course to participate intelligently in decision-making about health care, both in the public sphere and for oneself.

POLS 3303 AMERICAN GOVERNMENT AND POLITICS 48/0/0/3.0
Upon completion of this course, students will be able to explain the basic concepts of American democratic thought; analyze the formation, concepts, and components of the United States Constitution; examine the idea of federalism and explain the role of states and the national government; identify America's major political parties and their core beliefs; explain the electoral process in the United States; describe and explain the organization and purpose of the Legislative, Executive, and Judicial branches of government; describe the role and structure of the federal bureaucracy; describe the relationship between the state of Texas and the federal government; and compare the Texas state constitution with the national Constitution.

PSYC2301 GENERAL PSYCHOLOGY 48/0/3.0
Upon completion of this course, students will be able to explain basic psychological concepts; appreciate the theorists' explanations of human behavior; describe the therapeutic approaches; identify psychological disorders, their causes and treatments; and apply psychological principles to understanding and working with co-workers and customers.

PSYC1380 LIFESPAN HUMAN DEVELOPMENT 45/0/3.0
Upon completion of this course, students will be able to demonstrate knowledge of development across the human life span and apply this knowledge to their specific fields of study; demonstrate an understanding

of the theories, methods, and research findings of life-span psychology; describe how people change in terms of their cognitive, physical, social, and emotional development; compare the major developmental theorists and discuss what each adds to the study of human development; think critically about each of the developmental theories and research and demonstrate their thinking in written assignments; and apply basic principles of developmental psychology to their own life experiences.

PSYC 3648 ORGANIZATIONAL PSYCHOLOGY 48/0/3.0

This course will provide the students with a scientific examination of how human cognition, attitudes, and behavior are affected by the context of leaders, co-workers, and organizational policies, structure, culture, and so on. Core topics include motivation, leadership, group and team performance, job attitudes, organizational climate and culture, and organization development. Upon completion of this course, the student will be able to do the following:

1. Discuss major topics and subspecialties including critical theory and research findings that have defined the field of organizational psychology
2. Discuss the complicated systems of individual and group psychological processes involved in the world of work.
3. Connect principles of organizational psychology to personnel and human resources management within the organization
4. Explore the ways in which individual career choices and work-life success can be improved through the guidelines of organizational psychology

SOCI1358 SOCIOLOGY 45/0/3.0

Upon completion of this course, students will be able to describe the basic concepts in sociology; analyze culture, socialization, stratification, social organization, class, social interaction, social change, and conflict.; apply knowledge of sociology to a range of issues and real-life contexts; explain key aspects of cultural capital and how it can perpetuate inequality; and apply cultural capital and symbolic boundaries to the workings of major social institutions.

As of June 5, 2023, the following general education courses have been offered 100% online: GEOL1301, ENGL 1301, ENGL 1302, SCOM 1315, SPCH 1315, HIST 1301, HIST 1302, PHIL 1301 and PSYC2301 . The remaining courses remained hybrid.

POLICIES AND STANDARDS

Student Orientation

Prior to beginning classes, all new students participate in an orientation program. Orientation delivery may be online or on ground, depending on the program. This is discussed at the time of enrollment. Orientation facilitates a successful transition into WTC; therefore, attendance for new students is imperative regardless of prior college experience. At orientation, students are acquainted with their peers, campus, administrative staff, and faculty. Administrative departments explain ways in which they assist students and clarify students' rights and responsibilities.

Attendance Policies

To prepare students for employment, WTC deems it essential that absenteeism and tardiness be kept to an absolute minimum. WTC enforces attendance policies which require students to attend class regularly and punctually. All absences and tardiness are recorded regardless of the reason.

The College will evaluate each student's attendance at the end of each term. In cases of excessive absenteeism or tardiness, the College may take disciplinary action prior to the end of the term; however, students will be afforded reasonable opportunities in which to bring their overall attendance to the minimum benchmark of 85% in the term. Students who miss more than 15% of their scheduled classes after the first term will be placed on attendance probation for the following term.

A student missing over 15% of the scheduled class days during the probationary period may be terminated from the College. A student is at risk of being terminated when their absences exceed 15% of the total hours in the program. Authorized Leaves of Absence (LOA) are not included in the attendance percentage of a term.

As mandated by the Texas Workforce Commission, the school's state regulating body, consecutive absences (without an approved leave of absence) cannot exceed ten (10) consecutive school days or more than 20% (25% for the Commercial Driver Training program) of the scheduled course for the program, whichever is less. For purposes of this policy, the College counts all weekdays (not weekends) toward the ten-day maximum, regardless of whether the student has classes scheduled on a specific weekday. A student with absences more than the limits of this policy will be processed as a drop from the program.

Tardy Policy

A student's time will be deducted to the nearest quarter for arriving late to class, from breaks and for leaving early for the day. If a student arrives any time after 8:00 a.m., but before 8:15 a.m., they will be charged 15 minutes. If the student arrives after 8:15 but before 8:30 a.m., they will be charged for 30 minutes, and so on. The same applies when a student leaves class for any reason. A student must refer to the program syllabus for their program's policy.

Make-up Work and Hours

Students experiencing non-repetitive attendance problems may make up essential coursework missed due to absenteeism. It is the student's responsibility to contact their department program director or instructor to arrange for any make-up work and hours. No more than 5% of the total program clock hours can be made up. If a student misses a significant number of hours in a course, the instructor may determine that it is in the best interest of the student to repeat the course.

Instructors are required to advise students of their current attendance as well as academic status in school and generate advising forms for any academic or attendance issues that occur. If make-up hours are required, the instructor and program director must ensure that all make-up hours are completed before the prescribed due date.

All make-up work must be submitted to the program director for approval and must be completed within two weeks of the end of the grading period during which the absences occurred.

Leave of Absence (LOA)

A leave of absence (LOA) is a temporary interruption in a student's program of study and should be requested only in case of emergencies and extenuating circumstances including but not limited to medical reasons, jury duty, military service, incarceration, or death of a family member.

1. To request a LOA, a student must submit a written request via hard copy, text message, or email, to the registrar or student services coordinator. The written request must include the reason for the LOA and the amount of time needed. All LOAs must have prior approval by the student's program director and the campus president.
2. In the rare event a student is unable to submit a letter requesting the leave, the student must orally communicate with their program director, financial aid director, or campus president, and follow with electronic communication (text or email).
3. WTC discourages any requests for an additional leave of absence; however, WTC may grant only one (1) more additional LOA within a 12-month period if an unforeseen circumstance such as medical reasons, military service, or jury duty arises. The LOA, together with any additional leaves of absence, must not exceed a total of 180 days in any 12-month period.
4. A student on a LOA remains in active status; therefore, they are still obligated to maintain payments owed to WTC.
5. A student must return on the day they are required to return as stated in their Leave of Absence agreement. Failure to do so will result in a student's being dropped from the program.
6. Active military and veterans should refer to the language found in the financial aid section for the veterans' leaves of absence policy.

Leaves of Absence for 200-Hour Program

The campus president may grant a leave of absence after determining that good cause is shown. A student may have no more than two leaves of absence in a 12-month calendar period and may be on leave of absence for no more than 30 calendar days during that 12-month calendar period. School attendance records will clearly define the dates of the student's leave of absence. A written statement of the reason(s) why a leave of absence was granted, signed by the student and the campus president, indicating approval, will be placed in the student's permanent file. A student's enrollment in the program will be terminated if the student fails to return as scheduled from an approved leave of absence.

Student Academic Progress (SAP)

Below is a list of symbols used by the College to document attendance for students. Attendance is recorded by the instructor and posted daily.

Attendance Codes

P	Present
A	Absent
P#	Present Number of hours (Ex: P3)
M	Make Up Hours
I	Incomplete
W	Withdrawn
WF	Withdrawn Failed

Academic Grading Scale

Numeric Scale		Lett
98 – 100	4.0	A+
94 – 97.9	4.0	A
90 – 93.9	4.0	A-
88 – 89.9	3.75	B+
84 – 87.9	3.5	B
80 – 83.9	3.0	B-
78 – 79.9	2.75	C+
74 – 77.9	2.5	C
70 – 73.9	2.0	C-
68 – 69.9	1.75	D+
64 – 67.9	1.5	D
60 – 63.9	1.0	D-
BELOW 60 0.0		F

Satisfactory Progress
Upon completion of each course, all students will be able to access their progress report through the student portal. Students must achieve and maintain a cumulative grade point average (GPA) of 2.0 in all courses, and all course work must be satisfactorily completed for a student to be eligible for graduation.

Minimum Requirement for a 200-hour Program
A cumulative grade average of at least 70% is required for the student to receive a course certificate. A student will receive written notification of their progress at the midpoint and at the end of each two-week evaluation period. A student who is not making satisfactory progress at the midpoint will be placed on academic probation for the remainder of the progress evaluation period. The school's registrar will advise the student placed on probation prior to the student's return to class. The date, action taken, and terms of probation will be clearly indicated in the student's permanent file. If the student does not achieve satisfactory progress by the end of the probationary period, the student's enrollment will be terminated.

Unsatisfactory Progress
For the Commercial Driver Training program, a 200-hour program, the school will record a student's grades at the midpoint and at the end of each progress evaluation period. A student not making satisfactory progress at the midpoint will be placed on academic probation for the remainder of the progress evaluation period. If a student does not achieve satisfactory progress by the end of the probationary period, the student's enrollment will be terminated

The school will place on academic probation a student making unsatisfactory progress at the end of a term, and the probationary period will last through the next term. A student must have a cumulative GPA of 1.5 or higher after their first term to be considered for probation.

If the student achieves satisfactory progress during the first probationary term but does not earn the required grades to meet overall satisfactory progress for the program, the student may be allowed to continue academic probation for another term.

A student on academic probation who fails to achieve a cumulative GPA of 1.75 by the end of the second term will be dropped.

A student who fails a course but has a GPA of at least 2.0 will be given an advising form rather than being placed on probation. The student will be required to repeat the failed course and will be charged for tuition at the per hour rate in force at the time of scheduling the course.

- Because course work continues, a student whose attendance is problematic must complete any make-up hours during the term in which their attendance is flagged. The objective is for the student to meet the 85% attendance requirement. Should a student fall below the 85% requirement but has no failing grade, they will be given an advising form rather than being placed on probation.

NOTE: A term for certificate programs is measured by course. A term for degree programs is measured by semester.

Program Specific Satisfactory Progress

BSN and MBA students must achieve and maintain a cumulative grade point average of 3.0. BSN students must not have a course failure, otherwise the student will be placed on academic probation.

PTA students must achieve and maintain a minimum cumulative GPA and a minimum course grade of 2.75 (or a 78% numeric grade) in all core courses. Also, each written and practical examination must be completed
at a level of 74% or greater.

Medical Billing and Coding (MBC) students must maintain a 2.0 for the first course; otherwise, they will be dropped from the program.

BSN Program Academic Grading Scale

Numeric Scale		Letter
98 -100	4.0	A+
94 - 97.9	4.0	A
90 - 93.9	4.0	A-
84 – 89.9	3.5	B+
74.5 – 83.9	3.0	B
Below 74.5	0	F

Process for Grade Appeal

1. Informal Appeal (Initial Step)
    - The student must contact the course instructor within 2 business days of the grade being posted.
    - The student should clearly communicate specific concerns related to the grade, based on established grading criteria.
    - No formal form is required at this stage.
    - If the student is satisfied with the outcome, the matter is considered resolved.

2. Formal Appeal (If Unresolved)
    - If the student is not satisfied with the outcome of the informal step, they may proceed with a formal appeal.

- The student must contact the Registrar's Department within 5 business days of the grades being posted to initiate the process.
- The Registrar's Department will collaborate with the Program Director to initiate a Change of Grade Form.
- The instructor must respond to the formal appeal within 2 business days of being contacted.
- If the matter is resolved at this stage, the process concludes.

3. Final Appeal (If Still Unresolved)
    - If the student remains dissatisfied after the formal appeal, they may submit a final appeal to the Campus President.
    - The decision of the Campus President is final and concludes the appeal process.

Probation
Students falling below minimum attendance and academic requirements will have the length of the term to coordinate with their instructor to improve their grades and attendance to meet the minimum standards. A student who fails to meet the minimum requirements will be placed on attendance and/or academic probation. If the student still does not meet the minimum requirements after their probationary period ends, they may be dropped from their program.

Course Retakes
Since June 16, 2022, students who are required to repeat a course(s) due to having earned an "F" or a "WF" are required to adhere to the following policy.

1. Retakes are not part of the original cost for the program; therefore, students are required to pay for all retakes. Arrangements for payment must be made through the Student Financial Services. In the event the Financial Aid department determines that the student is not eligible for additional funding, the student must make payment arrangements with the Student Accounts Department. The representative will discuss payment options at that time, and the student must make arrangements before being allowed to return to school.
2. All retakes require mandatory tutoring. The amount of tutoring will be decided by the program director.
3. The maximum number of allowable course retakes for any program, except for BSN, is three (3). BSN students are allowed a maximum of one (1) course retake. If a student has taken the allowed number of course retakes, and needs another, the student may be dropped from the program, regardless of the Cumulative Grade Point Average.
4. Failure to pass any course retake will result in the student being dropped from the program.

It is the student's responsibility to ensure that they remain in good standing.

Students in the BSN program who fail two (2) courses will be dismissed from the program.

Note: Course retakes may result in a change to the expected graduation date. The registrar will notify students of their new expected graduation date via email, text or change of status form.

Drop/Withdrawal
If a student should elect to withdraw from their program for any reason before the completion of their training, the student is required to inform WTC in writing. Email or text message notifications are acceptable.

Official Withdrawal
The student is considered withdrawn when the written notification of the intention to withdraw is received by the registrar.

Unofficial withdrawal
A student's enrollment may be terminated after 14 consecutive calendar days of nonattendance and no contact from the student or when a student does not achieve the required cumulative GPA for their program.

Upon withdrawing or being dropped from a program, any scholarship or exemption credit(s) not earned for courses not taken may be charged back to the student. Credits to the student's account will follow the "Return to Title IV" policy (see the "Student Financial Services" section in this catalog). Any unused VA benefits will be returned to the VA.

Termination Process
A student may initiate the termination process by submitting a written statement explaining their reason for leaving and providing documentation when appropriate.

If a student is a veteran, they must provide the school with military orders; a student with a medical condition that renders them unfit must provide a doctor's notice; for any other circumstance, the student must make arrangements to communicate with the school.

When the school initiates the termination, the process is as follows:

- The program director will notify students that they have been terminated through telephone calls, text messages, and/or emails.

The system documents that notifications are received by archiving students' texts, emails, and telephone responses.
In all cases, terminations must be approved by the campus president, and documentation is entered in the school's student information system.

SUPPORT SERVICES

WTC is committed to serving students, whether they are enrolled in a program on-ground, or through a hybrid, or online delivery. Students are encouraged to contact employees they need to speak with in person or by email, telephone, or text message. Students may also ask for assistance by asking the administrative assistant to direct them to the department they need.

Student Services
This department serves to support students in successful completion of their programs. Often, external challenges arise and impact their goals in completing their education and starting their careers. WTC offers several services, such as these: tutoring , Federal Work Study job opportunities, external job leads, assistance with resumes , daycare, healthcare , transportation and ride share, counseling referrals, and off-campus housing information. resource directory is also made available to assist with multiple services.

An internal network comprising of instructors, administrators, and clerical support oversees student retention. The oversight is accomplished through the collaborative efforts exercised by various departments through verbal and written communications. Students are encouraged to speak to anyone that works at the school, and they will be directed to the Student Services office.

Counseling Services

WTC does not offer on-campus counseling services; however, StudentLinc (www.mystudentlinc.com), is available for students seeking professional counseling and/or health, financial, legal, and other services. The access code for StudentLinc can be found in the student services office or with the campus president. Copies of the directory are available electronically and in the student services offices and the campus president offices.

Advising
Academic, attendance, career, professional development, and continuing education advising are provided by faculty, program directors, registrars, dean, student services coordinators, and campus presidents. Advising services are provided to help students deal with concerns or problems so that they may maximize their college experience.

IT Services
On-ground, hybrid, or online students who are issued laptops for their training can access WTC's onsite and online IT services department. For technical issues, students may bring in their laptops to be examined by an IT Technician. If the laptop needs to be returned to the manufacturer because of a technical issue, the student may be issued a loaner device to be used until the laptop is returned to them.

WTC also provides online services through a Student Support link that online students can access 24/7, which helps provide guidelines on everything from the student LMS to web applications, to support services. Students experiencing issues can check the speed of their internet through this link. All supporting departments, to include the IT staff, distance education staff and faculty, and student services, have access to this link and are notified of any incoming issues.

Note: Students who break or lose their device are responsible for its replacement. The student must contact their program director for further guidance on this issue.

Student Accounts
All tuition is due and payable by the program start date unless satisfactory arrangements have been made with the school and as evidenced by a Retail Installment Contract and/ or approval of Federal Student Aid. Once the student is set up in the system, the Student Accounts Office is ready to help students with their scheduled payments for any gap balances they have or if they are sponsored through an agency or employer. If changes to the monthly payments must be initiated by the student, they can work through the department staff and/or the campus president for further assistance.

Student Financial Services Department
The Student Financial Services Department assists students in planning how to pay their educational costs. Each student is confidentially interviewed and their situation considered. Available payment arrangements are explained. Financial Aid is available for those who qualify, and the Financial Services Department is available to assist students with the Federal Student Aid application process. WTC participates in the Subsidized Direct Stafford Loan, Unsubsidized Direct Stafford Loan, Direct PLUS Loan, Federal PELL Grant, the Federal Supplemental Educational Opportunity Grant (SEOG) Program, and the Federal Work Study (FWS) Program.

Library
The libraries are available to current students and graduates of WTC. The libraries provide instruction, services, and materials to help enhance academic growth and personal enrichment to help support the College's mission. The centers provide a range of services for faculty as well as for students and alumni, including but not limited to the following:

- Book borrowing and searching capabilities
- Online catalogs
    - Online databases

The library hours of operation are posted at the school and on WTC's website (www.westerntech.edu).

Tutoring
Tutoring services are offered for students experiencing challenges with their studies or wanting additional academic assistance. Students on academic probation may be assigned mandatory tutoring by their program director. This tutoring is offered as a free service for the benefit of students. Students requiring assistance may speak with anyone, and services should be coordinated between the student and program director.

Testing Center
WTC offers testing facilities for students and the community. The College is authorized to provide certification and professional licensure examinations through GED, Pearson Vue and Manufacturing Skill Standards Council testing partners. The main hours of operation are from 8:00 am until 6:00 pm, Monday, Tuesday and Thursday, 8:00 am through 5:00 pm on Wednesday and 8:00 am through 12:00 pm on Fridays. For more information, contact the test administrator at 1-800-225-5984.

CAREER SERVICES

Employment Assistance
WTC, its board, administration, or any faculty or staff member cannot guarantee employment. The role of Career Services is to assist upcoming graduates and graduates in securing employment in their field of study. Specifically, Career Services representatives assist current students and graduates to start their new careers. Services include assisting Program Directors with the internship process by collecting attendance and other administrative duties. Any issues involving the student at the internship site is handled by the Program Director.

Career Services primarily assist with employment preparation. Specifically, Career Services assist students with interview techniques, conducting a successful job search, resume' writing, and students are required to undergo mock interviews with either an actual employer in the student's field of study or by a senior manager or director of Western Technical College in the event an employer is not available.

The Career Services staff is also required to actively search for job leads and work active job leads that come to the school, in the hopes of matching the graduate to meet the employer's needs. They are responsible for documentation and securing of Verification of Employment. They are also very active in getting employers to conduct on site interviews, conduct job fairs, and assist Program Director's in having PAC meetings on the premises.

Employer Expectations
Students and graduates should know that when hiring, employers may have minimal expectations of acceptable behaviors that include such items as driver's licenses and driving records or more serious offenses that may rise to involvement of law enforcement. Proof of any allegation of misconduct may result in action being taken by the school. Students are reminded that the school is always ready to provide support internally or in the form of community resources and are encouraged to seek assistance from any employee so that problems may be identified and remedied before they can interfere with getting or holding a job.

Students are encouraged to be truthful and honest about their backgrounds. In the event a background check reveals a misdemeanor or felony conviction that the student did not disclose to WTC before the check was administered, WTC reserves the right to act against the student to include but not be limited to suspension or termination from the program. The action depends upon the severity of the infraction, and the action will be determined by the Program Director, Academic Dean, and Campus President.

STUDENT CODE OF CONDUCT

Improper conduct on or off campus may result in suspension or termination. Any violation of WTC policies and standards, including safety violations, abusive language, unethical behavior, drinking, or illegal use of drugs (on or off campus) may result in suspension or termination. Students are required to follow College policies and standards while attending WTC. It is the student's responsibility to conduct themselves in a proper and respectable manner while attending the College.

Final determinations on suspensions are made by the campus president and/or program director. There is a maximum time frame of three (3) days per suspension.

Every student is responsible for adhering to all policies and procedures of WTC. This includes attendance problems; failure to act in accordance with the laws of a federal, state, or local government; failure to follow any policy or procedure of WTC; or any action detrimental to the classroom environment., Students are expected to respect the well-being of fellow students, faculty, staff, and the institutional facilities and to pay any outstanding balance owed WTC under the initial agreement.

Any student who fails to comply with the conduct standards may be subject to an oral or written reprimand, probation, suspension, or termination from WTC, depending on the nature of the infraction. Readmittance following such termination is at the discretion of the College and dependent on the nature and severity of the violation.

The following constitutes a common list of conduct violations. It does not include every possible scenario. Students should immediately report any conduct violations to their instructor or other school official.

1. WTC does not tolerate violence including threats, threatening behavior, harassment, intimidation, assaults, or similar conduct.
2. A student must not in any way disrupt or interfere with class instruction and learning and must obey the directives of WTC faculty and administration.
3. Food and drink are not allowed in classrooms. Eating and drinking are allowed only in designated break areas. Water will be allowed; however, it must be kept in a closed container.
4. Use of cellular phones is prohibited in the library, classrooms, labs, and shop areas.
5. The library and Internet are available only for school projects. Viewing illicit or inappropriate material or downloading any software is forbidden.
6. Students are expected to conduct themselves in an orderly manner. Profanity, vulgarity, loud talking, inappropriate discussion, or public displays of affection which may cause embarrassment to WTC or to fellow students is prohibited and not tolerated.
7. Smoking, the use of E-cigarettes, vapors, or any other tobacco products (like chewing tobacco, snuff, and so on) is not allowed in the buildings. Smoking, using E-cigarettes or vapors, or chewing tobacco are allowed in designated areas, in outside break areas only, and not in front of the building.
8. Loitering in front of or at the entrance of the buildings or in parking areas is not allowed.
9. For safety purposes, sports activities are not allowed on college property.
10. Students are expected to participate in classroom and lab activities. They must put forth a reasonable effort to learn. Loafing, sleeping in class, sitting on work/lab benches, horse playing, and not carrying out instructions are considered types of unsatisfactory conduct.
11. Fighting and gambling on college property are absolutely forbidden.
12. Spouses, children, family members, or friends are not allowed in classrooms unless authorized. Students will be asked to leave with the guest and will be docked for attendance.
13. The unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance or alcohol, or the presence of any controlled substance in a student's system is prohibited on this

institution's premises. These "premises" are defined as all school property including building interiors and exteriors, sidewalks, parking lots, privately owned vehicles parked on college premises, as well as desks, lockers, and storage areas. This prohibition applies to students performing any college-related tasks, attending school-sponsored functions, including field trips, and internships regardless of location, on or off college premises. Students are expected to comply with all requirements of the Drug-Free Schools Act.

14. Possession of a handgun under the authority of the Texas concealed handgun license law is prohibited on college premises. Possession of ammunition, long blade knives (blades over 3" long), and any other type of object that may be construed as a weapon is a violation of college rules and is not permitted. A student possessing weapons is subject to dismissal. Fake or toy guns are also not allowed on college premises.
15. Stealing and vandalism are prohibited. A student who commits such violations is subject to automatic dismissal and may be reported to local law enforcement.
16. Any student who willfully damages College property or property belonging to another student or removes a part(s) from training aids without instructor approval is responsible and liable for repair or replacement costs and is subject to dismissal.
17. Each student is expected to do their own work. Presenting work done by others, using dishonest means in taking tests, and aiding in cheating is forbidden, and a violator may be subject to suspension or termination. In addition to relying on teachers to detect and prevent cheating and plagiarism, WTC utilizes technology such as Lockdown Browser and Turnitin.. Students wishing to use AI-generated material must confer with their instructor before doing so. Student use must comply with college policy.
18. Safety is everyone's responsibility. Any student may be exposed to potentially dangerous situations, and it is very important that the classroom/lab/shop work areas be kept safe. Every student is responsible to help keep the school classroom/lab/shop areas clean, dry, and orderly.
19. Every student and every WTC employee are forbidden to fraternize,(socializing, dining, drinking, and the like).
20. Every student must have the appropriate tools at school daily. Each student is prohibited from downloading items on the College's computers or personal device anywhere in the College unless authorized by WTC's IT Department.
21. Under no circumstance is a student allowed to sell any items (food, beverages, school material, and the like) for personal gain on school property.
22. Solicitation by a student for any cause or organization is prohibited. The distribution of advertising materials, handbills, or any other literature on WTC property or via any electronic form of communication by a student is prohibited.
23. Each student is expected to keep the college environment free from intimidation and harassment against others because of sex, race, age, religion, national origin, and disability or any other protected status.
24. WTC is a community of trust whose existence depends in part on adherence to standards of conduct. This includes cases involving sexual misconduct and/or sexual assault or attempted sexual assault. A student who violates these standards is referred to the Title IX Coordinator. Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature when these conditions are met:
    - Submission to such conduct is made either explicitly or implicitly as a term or condition of an individual's enrollment
    - Submission to or rejection of such conduct by an individual is used as the basis for enrollment decisions affecting such individuals
    - Engaging in conduct that has the purpose or effect of unreasonably interfering with an individual's school performance or creating an intimidating, hostile, or offensive environment

WTC may report violators to the appropriate authority for civil or criminal action. WTC prohibits retaliation of any kind against students who, in good faith, bring sexual harassment complaints or assist in investigating complaints. Exercising rights under this policy does not in any way affect a student's right to seek relief through the Texas Commission on Human Rights, the Equal Employment Opportunity Commission, or in a court of proper jurisdiction for any complaint for which a remedy is provided under state or federal law. It is the responsibility of each student to be aware of the details of the foregoing policy.

Dress Code

All students are required to wear specified uniforms each day. Variations of the dress code may occur in a program under the direction of the program director and/or instructors. The WTC student dress code is as follows:

1. All students must wear their student-issued uniforms while they attend school.
2. For safety reasons, students must wear closed-toe shoes if enrolled in the hard trade, allied health, and Technology programs. All welding students must wear leather boots.
3. Where applicable, personal protective equipment must be worn as directed by each department.
4. Shorts, tank tops, sweatpants, or other clothing or headwear considered inappropriate by the school may not be worn at school.
5. Excessively long hair and beards may create a safety hazard and must be tied or braided during shop/laboratory.
6. Sunglasses are not to be worn anywhere inside the building.
7. Baseball caps or other headgear are not allowed in the classroom.

Students who fail to follow the dress code may be sent home and will be counted absent for the day.

NOTE: There may be exceptions to the dress code due to medical and/or religious reasons. Students are expected to communicate those reasons to their program director.

COMPLAINTS & APPEALS

Student Complaint/Grievance Procedure

Complaints are defined as any student concern regarding the school programs, services, or staff. A student who has a concern about a school-related issue is encouraged to schedule a meeting with the campus president to find resolution. If an issue is not resolved to a student's satisfaction through the meeting, the student can file a formal complaint in writing with the campus president who will formally investigate the complaint, take appropriate action, and provide a written response to the student by the 10th business day after the day the formal written complaint is received by member of the school faculty or staff. Note: a conference with the campus president is not required before a student files a formal written complaint.

Notification of Complaint to the Texas Workforce Commission

A student who is dissatisfied with the school director's response can file a complaint with the Texas Workforce Commission:

Texas Workforce Commission
Career Schools and Colleges, Room 226T 101 East 15th Street
Austin, Texas 78778-0001
Phone: (512) 936-3100

Information on filing a complaint with TWC can be found on TWC's Career Schools and Colleges Website at texasworkforce.org/careerschools

ACCSC Student Complaint Procedure
Schools accredited by the Accrediting Commission of Career Schools and Colleges must have a procedure and operational plan for handling student complaints. If a student does not feel that the school has adequately addressed a complaint or concern, the student may consider contacting the Accrediting Commission. All complaints reviewed by the Commission must be in written form and should grant permission for the Commission to forward a copy of the complaint to the school for a response. This can be accomplished by filing the ACCSC Complaint Form. The complainant(s) will be kept informed as to the status of the complaint as well as the final resolution by the Commission. Please direct all inquiries to:

Accrediting Commission of Career Schools &Colleges
2101 Wilson Boulevard, Suite 302
Arlington, VA 22201
(703) 247-4212
www.accsc.org| complaints@accsc.org

A copy of the ACCSC Complaint Form is available at the College and may be obtained by contacting complaints@accsc.org or at https://www.accsc.org/Student-Corner/Complaints.aspx OR requested from the campus president.

Texas Higher Education Coordinating Board Complaint Procedure
After exhausting the College's grievance/complaint process, a current, former, or prospective student may initiate a complaint with THECB by sending the required forms by electronic mail to StudentComplaints@thecb.state.tx.us, or by U.S. mail to the Texas Higher Education Coordinating Board, Office of General Counsel, P.O. Box 12788, Austin, Texas 78711-2788. Facsimile transmissions of the forms are not accepted.

For forms and a description of the complaint procedure, write to http://www.thecb.state.tx.us/links/student-complaints/ The THECB complaint form can be found at http://reportcenter.thecb.state.tx.us/agency-publication/blank-forms-templates/student-complaints- form/

Physical Therapist Assistant
Commission on Accreditation in Physical Therapy Education (CAPTE) Complaint Procedure
Standard WTC protocol will be followed regarding the grievance policy but with some variations that are specific to the Physical Therapist Assistant program. Those variations can be found on the WTC website, www.westerntech.edu.

Bachelor of Science in Nursing (BSN) Program Texas Board of Nursing Complaint Procedure
Standard WTC protocol will be followed regarding the grievance policy but with some variations that are specific to the BSN program. The web address for the Board of Nursing is http://www.bon.texas.gov. Select “Discipline & Complaints” and select “How to File a Complaint.” The variations can be found in the individual program section of this catalog and on the WTC website, www.westerntech.edu.

Medical Clinical Assistant (MCA) Commission on Accreditation on Allied Health Programs (CAAHEP) Complaint Procedure
Standard WTC protocol will be followed regarding the grievance policy but with some variations that are specific to the MCA program. The web address for the Commission on Accreditation on Allied Health Education Programs is https://www.cognitoforms.com/CAAHEP2/FileAComplaint

If you've exhausted Western Technical College’s complaint process for your distance education class and the issue remains unresolved, you can file a complaint through NC-SARA’s student complaint process at https://www.nc-sara.org/student-complaints. Alternatively, you may contact the SARA State Portal Entity

(SPE) for Texas. The most up-to-date SPE information is available at: https://www.nc-sara.org/state-portal-entity-contacts.

Appeals
Depending on the nature and severity of the violation, a student has the right to appeal as noted in the Student Code of Conduct. A student who files an appeal will be required to do the following:

- Submit a letter to the campus president, detailing the issues that surrounded the dismissal
- Request an appeal of the decision rendered, with reasons stating why WTC should reconsider
- The letter can be mailed or presented in person and MUST be signed by the student
- Letters must be sent within 10 days from the day of dismissal to be considered

Within 48 hours, the campus president will notify the complainant about who will determine if the violation merits further action.

TITLE IX AND SEX DISCRIMINATION

Title IX protects students, employees, and applicants for admission and employment. Everyone is protected by Title IX regardless of their race, color, religion, sex, national origin, age, disability, marital status, military or veteran status, sexual orientation, or gender identity. The Title IX Coordinator's role is to coordinate the institution's efforts to review and appropriately respond to all complaints of sex discrimination and to work with other school employees and the campus community to prevent sex-based and gender-based harassment.

Who should report the incident?

- Students or employees who believe they may be a victim of sexual harassment or sexual violence
- Students and employees who believe they may have witnessed sexual violence involving a student or employee
- Students and employees should also report to the Title IX Coordinator any retaliation against them by any school employee for reporting a Title IX violation or for cooperating with or being involved in a Title IX disciplinary proceeding.

Reporting
Any employee who is subjected to or witnesses a possible incident of sexual harassment or other unlawful harassment or discrimination or has witnessed or become aware of discrimination or harassment in violation of these policies should promptly report the matter to one of the following: their supervisor, the Human Resources Director/Title IX Coordinator, or the next higher authority. If an employee feels it is not appropriate to report any issue or incident to their supervisor, the employee may contact any other member of management, including the COO or CEO of WTC.

The College promptly investigates all allegations of discrimination and harassment, and acts appropriately, based on the outcome of the investigation. An investigation and its results will be treated as confidential to the extent feasible. Employees who raise concerns and make reports in good faith can do so without fear of reprisal; at the same time, employees have an obligation to cooperate with the College to enforce this policy and investigate and remedy complaints.

Anyone found to have engaged in such wrongful behavior will be subject to appropriate discipline, which may include immediate termination of employment. The severity of any such discipline imposed is left to the sole discretion of the College.

Any employee who files a complaint of sexual harassment or other discrimination in good faith will not be adversely affected in terms and conditions of employment and will not be retaliated against because of the complaint.

In addition, the College does not tolerate retaliation against any employee who, in good faith, cooperates in the investigation of a complaint. Anyone who engages in such retaliatory behavior will be subject to appropriate discipline, up to and including termination of employment.

If after investigating any complaint of harassment or unlawful discrimination, the College determines that the complainant or a witness has provided false information regarding the complaint, disciplinary action will be taken, up to and including discharge/termination.

The Title IX policy can be found on www.westerntech.edu under About WT.

The Title IX Coordinator is the individual designated by the College to coordinate its efforts to comply with Title IX.

Questions or concerns about Title IX can be directed to
Martha Molinar, Title IX Coordinator
Main Campus: 9624 Plaza Circle, El Paso, TX 79927
Branch Campus: 9451 Diana Drive, El Paso, TX 79924
Office: (915) 760-8164
Cell: (915) 497-2433
mmolinar@westerntech.edu

SAFETY and SECURITY

The College is committed to ensuring the safety and general welfare of those on the campuses and to providing appropriate policies, procedures, and strategies to maintain safe campuses.

The College has procedures designed to assist staff and students in dealing with any hazard or threat that may arise while they are on a WTC campus and to protect employees, students, the community, the environment, and property. Unique situations may require variations in the plan. The safety plan is intended to provide response protocols to be followed in the event of an emergency. The objective is to minimize the threat to employee and student safety during a crisis through familiarization with emergency response procedures. Emergency policies and procedures are located in every classroom and found with every program director and the campus president.

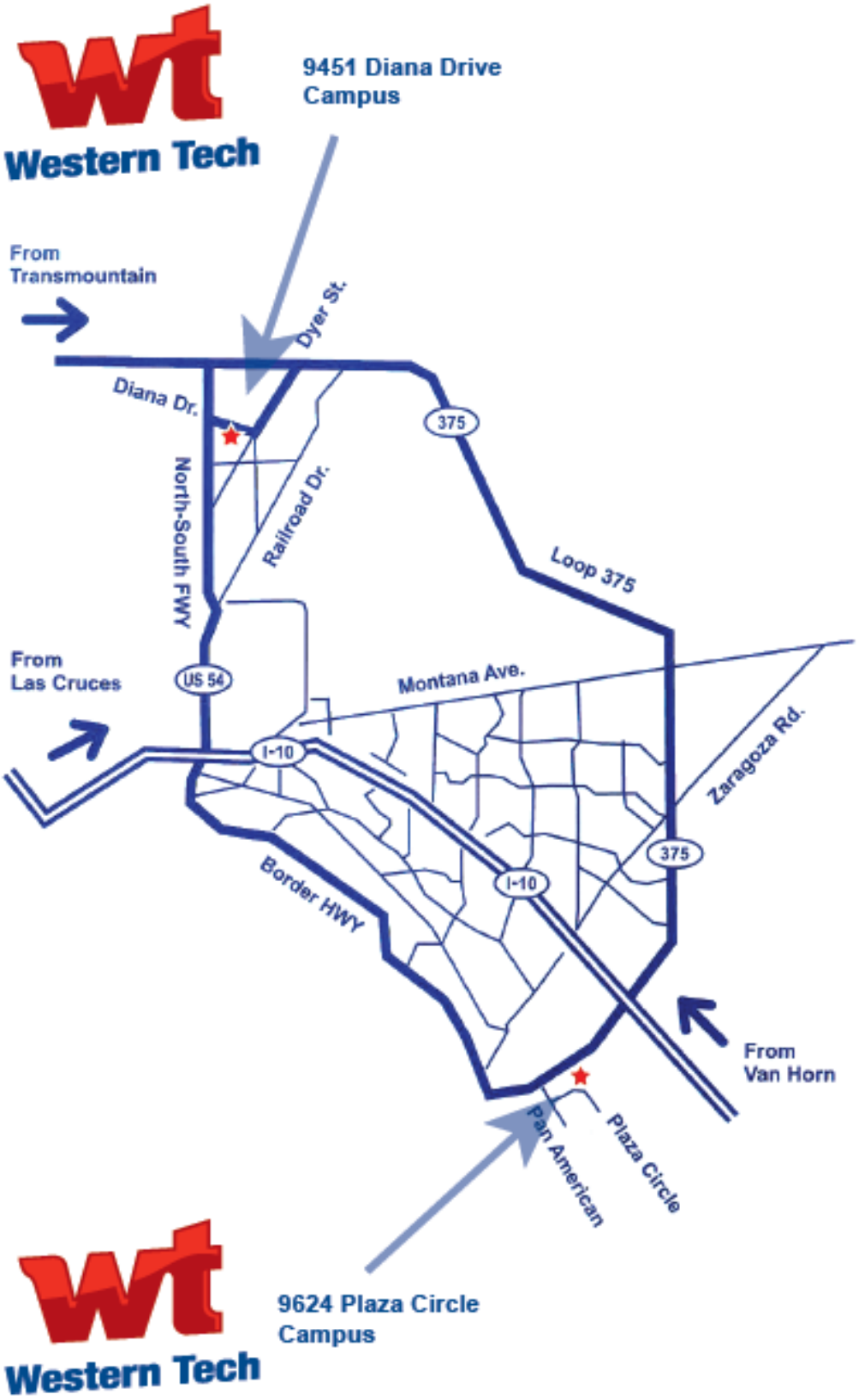
Change in Scheduled Operations

A change in scheduled operations including weather-related closing announcements, class cancelations, early dismissal, emergency evacuation, and the like will be made through these channels:

- WTC text message alert system
- On site at both campuses via signage
- Via the WTC email address provided to students, instructors, and staff
- www.westerntech.edu WTC homepage
- Via Canvas Learning Management System
- Via local broadcast media

"Anyone who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young. The greatest thing in life is to keep your mind young."

- Henry Ford


Western Tech
9451 Diana Drive
Campus
From
Transmountain
Dyer St.
Diana Dr.
375
North-South FWY
Railroad Dr.
Loop 375
From
Las Cruces
US 54
Montana Ave.
I-10
Zaragoza Rd.
375
Border HWY
I-10
From
Van Horn
Pan American
Plaza Circle
Western Tech
9624 Plaza Circle
Campus

OUR MISSION

The Mission of Western Technical College is to: Provide quality training and education in a caring, professional environment that prepares new students and working adults with the skills they need to succeed and advance in their chosen careers.

Scan QR code to Visit our Website

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Western Tech

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