Texas State Technical College Marshall Program Offerings

Architecture & Construction

Computer Aided Drafting

Multimedia Publishing

Office Technology
Enhanced Workplace Productivity

Technology

Computer Systems/Networking Administration
Computer Systems Desktop Support
Multimedia Publishing
Software Engineering Technology
Webmaster

Manufacturing

Basic Machining
Combination Welding
Computer Integrated Manufacturing Technology
Instrumentation
Quality Assurance
Process Operations Technology

Science, Technology,
Engineering & Mathematics

Biomedical Equipment Technology
Electric Utility Construction & Maintenance
Environmental Health & Safety Technology
Industrial Electrical Technician
Industrial Maintenance Mechanic
Industrial Mechatronics Technician
Industrial Technology

Transportation,
Distribution & Logistics

Diesel Equipment Technology

Equal opportunity shall be afforded within the Texas State Technical College System (TSTC) to all employees and applicants for admission or employment regardless of race, color, gender, religion, national origin, age, or disability. TSTC complies with the Texas Equal Opportunity Plan.

TSTC will make reasonable accommodations for persons with disabilities. TSTC's policy is that, in all aspects of its operations, each person with a disability shall be considered for admission or access to or treatment or employment in its programs and activities in accordance with Part 4 of Title 45, the regulation implementing Section 504 of the Rehabilitation Act of 1973.

Texas State Technical Colleges are accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate of Applied Science degrees and Certificates of Completion. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500. For questions about the accreditation, students may review accreditation records in the TSTC Office of the President.

TSTC reserves the right to limit the enrollment of any program and to make any changes in the provisions of this catalog when such action is deemed to be in the best interest of the student or TSTC. TSTC reserves the right to change any of this catalog's provisions, without notice or obligation, in keeping with the policies of the Board of Regents and in conformance with the laws of the State of Texas. This catalog is not a legal document and does not constitute a contract between TSTC and the user. The catalog may also be found on TSTC's Web site at www.tstc.edu. If you require this document in an alternative format, please contact the TSTC College Relations Office.
TSTC Marshall President’s General Welcome

Welcome to Texas State Technical College Marshall! Whether you are a new high school graduate or have been in the workplace for many years, our goal is to prepare you to enter or re-enter the world of work with both the knowledge and skills needed for success. TSTC Marshall can help you reach your goals regardless of your past educational experience.

TSTC Marshall is growing rapidly, due to the establishment of new programs and important revisions and extensions of others. TSTC prides itself in keeping pace with business and industry so that our graduates are “work-ready” the first day on the job. The level of student achievement is accomplished through both academic and “hands-on” technical education and training, using industry-standard equipment. Most of our curricula are laboratory-based, and you will gain invaluable experience while you learn. While TSTC’s brand of education is work-based, it is also rigorous, requiring significant time and work on your part; but, the work will be worth the effort.

While we emphasize work, at TSTC Marshall, there are also opportunities for student activities and social interactions with others. Student housing is available, and student organizations provide opportunities for students to develop their professionalism and serve others.

Our first priority is your learning and your success! You will find our faculty and staff to be responsive and caring. Thank you for enrolling at TSTC Marshall.

Randall E. Wooten
President

Administration

Randall E. Wooten, President
B.S. Texas A&M University - Commerce
M.S. Troy University
M.S. Air Command & Staff College
M.S. Air War College

Irene Cravey, Vice President of Student Learning
B.S. Texas Wesleyan College
M.S. University of Texas at Tyler
Ed.D. Stephen F. Austin State University

Deborah Sanders, Vice President of Financial Services
B.S. Southeastern Oklahoma State University
M.B.A. Oklahoma City University

Cynthia Leleko, Associate Vice-President
TSTC Corporate College
B.S. Wiley College
M.S. Our Lady of the Lake University

Suzanne K. Carter, Dean of Enrollment Management
B.S. East Texas State University
M.S. Texas A&M University - Commerce

Annette Ellis, Associate Dean of the Learning Community
B.A. University of Texas at Tyler
M.S. University of Texas at Tyler

April Graham, Associate Dean of Learning Success
B.S. Texas A&M University - Commerce
M.A. Stephen F. Austin State University

Jeffery W. Bell, Director of Human Resources
B.S. Baker University
M.B.A. University of North Texas

Dennis J. Burre, Director Network and Telecommunication Services
B.S. California State University, Chico
M.S. University of Southern California

Mittie D. Hutchins, Director of Institutional Effectiveness, Research and Planning
B.S. Texas A&M University - Commerce
M.B.A. East Texas Baptist University

George H. Richardson, Executive Assistant to the President
B. Th. Northwestern Christian College
M. Div. The Graduate Seminary of Phillips University
**Table of Contents**

President's Welcome ................................................................. 1  
Institutional Purpose & Goals .................................................... 3  
Vision & Values ........................................................................ 4  
College Calendar ...................................................................... 6-7  
Admissions Information ............................................................ 8-10  
Tuition and Fees ...................................................................... 10-14  
Refunds ..................................................................................... 15-17  
Financial Assistance ............................................................... 17-20  
Scholastic Information ............................................................... 21-25  
Degree and Program Planning .................................................. 26-32  
Enrollment ............................................................................... 32-33  
Student Services ..................................................................... 34-38  
General Information ............................................................... 39-42

**Instructional Programs**

**Computer Integrated Manufacturing Technology**
Basic Machining Certificate ..................................................... 44  
Combination Welding Certificate ................................................ 44  
Computer Aided Drafting AAS .................................................... 44  
Computer Aided Drafting Certificate ........................................ 45  
Computer Aided Manufacturing AAS ......................................... 45  
Computer Aided Manufacturing Certificate ............................ 46  
Quality Assurance Certificate ................................................... 46  
Enhanced Workplace Productivity Certificate ........................ 46

**Computer Systems Networking**
Computer Systems Desktop Support AAS ............................... 47  
Computer Systems Desktop Support Certificate ..................... 47  
Computer Systems/Networking Administration AAS ............... 47-48

**Diesel Equipment Technology**
Diesel Engine Repair Certificate ............................................. 49  
Diesel Equipment Technology AAS ........................................... 49  
Diesel Equipment Technology Certificate ............................... 49  
Intro to Diesel Equipment Certificate ..................................... 49

**Environmental Health Safety & Quality Technology**
Environmental Health & Safety Technology ............................ 50  
Environmental Health & Safety Certification 1 ....................... 50  
Environmental Health & Safety Certification 2 ....................... 51  
Construction Safety Management Enhanced Skills Certificate ... 51

**Industrial Technology**
Electric Utility Construction & Maintenance (Lineman Program)  
Certificate .............................................................................. 52  
Industrial Electrical Technician AAS ....................................... 52-53  
Industrial Maintenance Mechanic AAS .................................... 53  
Industrial Mechatronics Technician AAS ................................. 53  
Introduction to Industrial Maintenance Certificate .................. 54

**Instrumentation, Process Operations Technology**
Biomedical Equipment Technology AAS ............................... 55  
Biomedical Equipment Proficiency Enhanced Skills Certificate ... 55  
Introduction to Industrial Technology Certificate ..................... 55  
Instrumentation AAS ............................................................... 56  
Process Operations Technician AAS ......................................... 56

**Software Engineering Technology**
Multimedia Publishing AAS ..................................................... 57  
Office Technology AAS .......................................................... 57  
Office Technology Certificate ................................................. 58  
Software Engineering Technology AAS ................................. 58  
Webmaster AAS ...................................................................... 59  
Course Descriptions ................................................................ 62-78  
Faculty Directory ................................................................... 79  
Index .................................................................................... 80-81

www.tstc.edu • 888.382.8782
Institutional Purpose and Goals

Statement of Purpose

TSTC’s purpose or mission is described in Vernon’s Texas Education Code Section 135.01:

“The Texas State Technical College System is a co-educational two-year institution of higher education offering courses of study in technical-vocational education for which there is a demand within the state of Texas.

The Texas State Technical College System shall contribute to the educational and economic development of the State of Texas by offering occupationally-oriented programs with supporting academic coursework, emphasizing highly specialized advanced and emerging technical and vocational areas for certificates or associate degrees. The Texas State Technical College System is authorized to serve the State of Texas through excellence in instruction, public service, faculty and manpower research and economic development. The system’s economic development efforts to improve the competitiveness of Texas business and industry include exemplary centers of excellence in technical program clusters on the system’s campuses and support of educational research commercialization initiatives. Through close collaboration with business, industry, governmental agencies and communities, including public and private secondary and postsecondary educational institutions, and the system shall facilitate and deliver an articulated and responsive technical education system.

In developing and offering highly specialized technical programs with related supportive coursework, primary consideration shall be placed on industrial and technological manpower needs of the state. The emphasis of each Texas State Technical College System campus shall be on advanced or emerging technical programs not commonly offered by public junior colleges.”

Equal opportunity shall be afforded within the Texas State Technical College System (TSTC) to all employees and applicants for admission or employment regardless of race, color, gender, religion, national origin, age, or disability. TSTC complies with the Texas Equal Opportunity Plan.

TSTC will make reasonable accommodations for persons with disabilities. TSTC’s policy is that, in all aspects of its operations, each person with a disability shall be considered for admission or access to or treatment or employment in its programs and activities in accordance with Part 4 of Title 45, the regulation implementing Section 504 of the Rehabilitation Act of 1973.

Texas State Technical Colleges are accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate of Applied Science degrees and Certificates of Completion. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500. For questions about the accreditation, students may review accreditation records in the TSTC Office of the President.

TSTC reserves the right to limit the enrollment of any program and to make any changes in the provisions of this catalog when such action is deemed to be in the best interest of the student or TSTC. TSTC reserves the right to change any of this catalog’s provisions, without notice or obligation, in keeping with the policies of the Board of Regents and in conformance with the laws of the State of Texas. This catalog is not a legal document and does not constitute a contract between TSTC and the user. The catalog may also be found on TSTC’s Web site at www.tstc.edu. If you require this document in an alternative format, please contact the TSTC College Relations Office.

Expanded Statement of Institutional Purpose
For Texas State Technical College Marshall

Texas State Technical College Marshall is a coeducational, two-year, public technical college within the Texas State Technical College System. The College offers programs of study leading to Technical Skills Mastery Certificates (TSMC), Certificates of Completion and Associate of applied Science degrees. These educational programs include preparation for high demand, advanced, and emerging technology fields; developmental education; and general education courses in the humanities, mathematics, and sciences. The College provides a comprehensive teaching and learning environment with a constant focus on individual student achievement and skill enhancement. The College cultivates student-focused strategic partnerships with school districts, colleges, universities and employers and provides supportive transitions through articulated educational and professional pathways.

Texas State Technical College Marshall is committed to the economic development of Texas. To enhance the economic competitiveness of the state, the College provides specialized training and services for business and industry, continuing education, and community service programs. Additionally, TSTC Marshall offers courses to students at the secondary level that can apply towards both their high school graduation requirements as well as credit at the college level.

The faculty and staff of Texas State Technical College Marshall believe strongly in the worth and dignity of each individual and provide students with opportunities for personal and intellectual growth by offering a full range of services. These services include career and guidance counseling, tutoring, student activities, accommodations for students with special needs, financial aid, housing, and provisions for health care.

Revised 4/09

www.tstc.edu • 888.382.8782
Vision and Values

The Texas State Technical Colleges will be a leader in strengthening the competitiveness of Texas business and industry by building the state’s capacity to develop the highest quality workforce.

**Excellence**
Achieving the highest quality in all we do

**Leadership**
Developing visions and strategies for a desired future, and aligning and energizing people to achieve those visions

**Innovation**
Creating and implementing new ideas and methods

**Collaboration**
Working cooperatively with other organizations and within our own system.

**Responsiveness**
Providing appropriate programs and services in a proactive, flexible, and timely manner

**Accountability**
Measuring our performance and using the results for improvement

**Stewardship**
Ensuring our programs and services add value to our students and communities throughout the state, and operate in accordance with the public trust for which we are responsible

The TSTC System

Texas State Technical College (TSTC) was established in 1965 as the James Connally Technical Institute (JCTI) of Texas A&M University to meet the state’s evolving workforce needs. This college was located in Central Texas at the former James Connally Air Force Base in Waco. At the time, Governor John Connally predicted that it would be “the most sophisticated technical-vocational institute in the country.”

In 1967, JCTI expanded to include a South Texas campus in Harlingen. In 1969, the colleges separated from Texas A&M University and became an independent state system, with the name Texas State Technical Institute (TSTI) and its own Board of Regents. Additional campuses were created in 1970 in Amarillo in the Panhandle of Texas and in Sweetwater in West Texas. As the demand for quality technical education continued to grow, extension centers were established in McAllen (1983), Abilene (1985), Breckenridge (1989), Brownwood (1991), and Marshall (1991). In 1991, TSTI was renamed Texas State Technical College (TSTC). In 1999, the extension center in Marshall became an independent college of the system.

Today, serving as the corporate college for Texas, TSTC offers new, emerging and customized curriculum at four colleges: TSTC Harlingen, TSTC Marshall, TSTC Waco, and TSTC West Texas, which has campuses in Abilene, Breckenridge, Brownwood, and Sweetwater. In addition, programs and customized training are offered at partnership centers throughout the state.

TSTC is the only state-supported technical college system in Texas. TSTC’s statewide role and mission is to efficiently and effectively help Texas meet the high-tech challenges of today’s global economy, in partnership with business and industry, government agencies, and other educational institutions. TSTC has high graduation rates, exceptional postgraduate success rates, and an outstanding record in graduating individuals from diverse cultural and socioeconomic backgrounds. More than 30,000 students are served each year through traditional degree programs, short-term continuing education and corporate training programs.

Among TSTC’s strengths are its emphasis on “learning by thinking and doing” and its strong relationships with business and industry, state-of-the-art laboratories, residential campuses, and student-centered philosophy.

“We believe in people. We believe people desire to be responsible and productive citizens. We believe technology is a force to be explored and channeled by people in a productive and responsible manner for the benefit of all humankind. Therefore, we believe all people should be provided with the educational opportunity to learn the skills necessary to perform meaningful work and, thereby, pursue their goals as responsible citizens contributing to the welfare and success of their families, communities, state, nation, and world.”

Governance and Accreditation

The TSTC System is governed by a nine-member Board of Regents and operated under the direction of a system wide Chancellor. These Regents, who provide a statewide perspective, are appointed by the governor to six-year terms. The Board meets quarterly to provide leadership and enact policies for the successful management and operation of the system. The Colleges operate under the rules and regulations of the Texas Higher Education Coordinating Board.

The Texas State Technical College System Chancellor is
Bill Segura, Ph.D.

The TSTC System Board of Regents include:

J. V. Martin, Chairman;
Rolf R. Haberecht, Ph.D. Vice Chairman;
Barbara N. Rusling, Executive Committee Place 1;
Joe M. Gurecky, Executive Committee Place 2;
Nora Castañeda, Member;
Joe K. Hearne, Member;
Michael F. Northcutt, Member;
Gene Seaman, Member; and
Ellis M. Skinner, II, Member.
TSTC Marshall is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate of Applied Science degrees and Certificates of Completion. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about accreditation. Students may review accreditation records in the TSTC Office of the President.

Equal opportunity shall be afforded within the Texas State Technical College System to all employees and applicants for admission or employment regardless of race, color, gender, religion, national origin, age, or disability.

TSTC is a member of the American Association of Collegiate Registrars and Admissions Officers and is listed in that association’s Report of Credit Given.
2009-2010 College Calendar

Texas State Technical College Marshall

**Fall 2009**

- July 1 – Aug. 28
- July 28
- Aug. 6
- Aug. 11
- Aug. 20
- Aug. 28
- Aug. 28
- Aug. 31
- Sept. 4
- Sept. 7
- Sept. 15
- Sept. 25
- Sept. 28
- Oct. 2
- Oct. 28
- Oct. 29
- Nov 2 – Jan. 8
- Nov. 13
- Nov. 26-27
- Dec 8
- Dec. 11
- Dec. 23 – Jan. 1

**Spring 2010**

- Nov 2 – Jan. 8
- Dec. 8
- Jan. 5
- Jan. 8
- Jan. 11
- Jan. 15
- Jan. 18
- Jan. 26
- Feb. 5
- Feb. 8
- Feb. 12
- March 1 - May 7
- March 8
- March 15 - 19
- March 25
- April 1
- April 2
- April 30

- Fall 2009 pre-registration
- Orientation & registration for new students
- Orientation & registration for new students
- Orientation & registration for new students
- Orientation & registration for new students
- Housing “move-in” day
- Registration & Payment deadline*

**First Class Day**

- 1st day to apply for fall 2009 graduation
- Last day to change schedules (drop/add)
- Staff/student holiday
- 11th Class Day
- 19th Class Day
- 2nd Tuition/Housing installment due
- Deadline to apply for fall 2009 graduation
- 3rd (final) Tuition/Housing installment due
- Industry & Career Day
- Spring 2010 pre-registration
- Last day to drop/withdraw with a grade of “W”
- Staff/Student holidays
- Orientation & registration for new students
- End of semester
- Final grades due by noon (via Web Advisor)
- Commencement
- Staff holidays (campus closed)

- Spring 2010 pre-registration
- Orientation & registration for new students
- Orientation & registration for new students
- Housing “move-in” Day
- Registration & Payment deadline*

**First Class Day**

- 1st day to apply for spring 2010 graduation
- Last day to change schedules (drop/add)
- Staff/student holiday
- 11th Class Day
- 19th Class Day
- 2nd Tuition/Housing installment due
- Deadline to apply for spring graduation
- Summer 2010 pre-registration for all summer terms
- 3rd (final) Tuition/Housing installment due
- Spring Break
- Industry & Career Day
- Last day to drop/withdraw with a grade of “W”
- Staff/student holiday
- End of semester
- Final grades due by noon (via Web Advisor)
- Commencement
### Summer I 2010 (15 week term)

- **March 1 – May 7**: Summer 2010 pre-registration for all summer terms
- **May 7**: Registration & payment deadline*
- **May 10**: First Class Day
  - 1st day to apply for summer 2010 graduation
- **May 14**: Last Day to register or add a class (Summer I)
- **May 24**: 11th Class Day
- **May 31**: Staff/Student Holiday
- **June 4**: 19th Class Day
- **June 7**: 2nd Tuition/Housing installment due
- **June 11**: Deadline to apply for summer graduation
- **July 1**: Fall 2010 pre-registration
- **July 7**: 3rd (final) Tuition/Housing installment due
- **July 16**: Last day to drop/withdraw with a grade of “W”
- **Aug. 20**: End of semester
- **Aug. 30**: Final grades due by noon (via Web Advisor)

*Tuition & housing payments must be received in Business Office by 5 p.m.

### Summer II 2010 (12 week term)

- **May 27**: Orientation & registration for Summer II term
- **June 1**: First Class Day
- **June 11**: Census Day
- **July 5 – Aug 27**: Fall 2010 pre-registration
- **July 16**: Last day to drop with a grade of “W”
- **August 20**: End of Semester
- **August 30**: Final grades due by noon (via Web Advisor)
- **First class day Fall 2010**

Please check with Admissions and Records Office or College Relations for the 2010-2011 Calendar.
Admissions Information

Personal Interviews and Campus Tours

Prospective students and their families are strongly encouraged to visit TSTC before registering for classes. During a campus visit each prospective student is assigned to an admissions advisor or education and career specialist (ECS), who serves as a personal contact to help in the transition to college. These staff members assist prospects and applicants throughout the testing, application, and registration processes. Contact the College Relations Office to schedule a personal interview and campus tour.

Admission Requirements

General Admission Requirements

Students who apply for admission into college credit programs may be admitted to any college within the Texas State Technical College System under any of the following categories. These apply to students in college credit programs.

- **Graduate from a high school** accredited by a state department of education and/or a recognized regional accrediting association.

- **Transfer from another college, university, or other higher education institution** that is regionally accredited.

- **Complete a GED Certificate** (General Education Development), as certified by a state education agency.

- **Meet international student criteria.** Potential students who are not United States citizens must present proper documentation for an appropriate visa category. Additional information relating to academic background and financial support, as well as a personal interview, may be required for admission. See “International Students” under the Admission Procedures section for further information.

- **Meet individual approval criteria.** Potential students who do not meet any of the above requirements and are age 17 or older and no longer attending high school may be admitted through individual approval.

- **Meet exceptional admission criteria.** Potential students who are under age 17 may be admitted through the exceptional admission program under one of the following categories, provided they present sufficient evidence that they can do college-level work as determined by the institution.

- Age 16 or older and currently enrolled in high school without a diploma or GED, or age 16 and a graduate of an unaccredited or home high school.

- Age 16 and no longer attending high school, or age 15 or younger.

In addition, all applicants must submit scores from an approved Texas Success Initiative (TSI) test, a TSTC-administered placement test, or provide appropriate documentation of TSI exemption or waiver.

Additional Program Admission Requirements

Some college credit programs have additional requirements that must be met before students may be admitted into those particular programs. These may include minimum scores on the admission placement test or other departmental tests, a physical standards statement assessing their physical capabilities for the program, letters of recommendation, or other program-specific requirements. The Admissions and Records Office can provide additional requirements applicable to selected programs.

Admission Procedures

General Admission Procedures

These procedures apply to students enrolling in college credit programs.

1. Complete an online admission application at www.tstc.edu.
2. Note that proof of Texas residency may be required to obtain resident tuition rates.
3. Depending on the category under which the applicant qualifies for admission, submit the following additional documents.
   (a) High school graduate: an official copy of high school transcript
   (b) College or university transfer: official transcripts from all institutions of higher education attended previously
   (c) GED: a copy of GED certificate or official score report
   (d) Individual approval students: individual approval form
   (e) Exceptional admission students:
      - Age 16 or older and currently enrolled in high school without a diploma or GED: exceptional admission form signed by parent or guardian and high school representative; qualifying scores in writing and/or reading and/or mathematics on approved assessment instruments.
      - Age 16 or older and a graduate of a home high school or unaccredited high school: exceptional admission form (signed by parent or guardian if age 16).
7. Valid visa, passport, and I-20 (applies to applicants already in the United States)

Due to delays in international communications, international applicants are encouraged to complete all admission requirements at least 90 days prior to the expected entry date. When TSTC receives all the required documents, the applicant will be issued an acceptance letter and an I-20MN.

International students must adhere strictly to United States Citizenship and Immigration Services laws. Therefore, they must:

1. be enrolled as full-time students and maintain satisfactory progress in their coursework;
2. maintain an I-94 on file in the Admissions and Records Office;
3. carry medical and hospitalization insurance;
4. not obtain federal financial aid (except students holding I-551 visas); and
5. comply with all TSTC regulations, laws of the State of Texas, and laws of the United States.

Failure to comply with any of the above regulations may result in termination from TSTC and deportation.

Academic Fresh Start

Texas Education Code 51.929 entitles residents of Texas to seek admission to public institutions of higher education without consideration of courses undertaken ten or more years prior to enrollment. This bill has been called the “right to academic fresh start” and it gives students the option of electing to have coursework taken ten or more years prior to the starting date of the semester in which the applicant seeks to enroll either counted as usual or ignored for admission purposes.

Applicants who elect to apply for admission under this law and who are admitted as students may not receive any course credit for courses undertaken ten or more years prior to enrollment. The Admissions Office may be contacted for further information regarding academic fresh start.

Academic fresh start can only be applied for and granted prior to initial enrollment. Applicants to TSTC who wish to apply for fresh start should complete the Academic Fresh Start form available at the Admissions and Records Office.

Early Admission/Concurrent High School/Dual Credit

TSTC has agreements with many high school districts that permit eligible high school students to earn college credit while concurrently satisfying high school graduation requirements.
Upon approval by the high school principal or designee and acceptance to TSTC through the exceptional admission program, a student may enroll in college courses taught either at the high school or at TSTC. Some fees may be waived in selected courses.

Students must earn passing grades in all college courses that they have attempted in order to maintain satisfactory academic progress. Enrollment in developmental courses is not permitted for a student enrolling under the exceptional admission program (concurrent high school or dual credit).

College credits earned through the exceptional admission program will be accepted by most institutions on the same basis as other college credit. There is a possibility, however, that a specific college may add additional requirements for transfer purposes.

Participation in the exceptional admission program may make some students ineligible for University Interscholastic League competition in certain areas, depending on the course taken.

Contact the TSTC Admissions and Records Office or your high school counselor for more information.

Placement Testing

Prior to enrollment in credit courses, students must comply with placement testing requirements by submitting their scores on an approved Texas Success Initiative (TSI) test, by submitting documentation of TSI exemption or waiver, or by taking a TSTC-administered placement test. See “Testing and Placement Requirements” in the Scholastic Information section.

Assessment requirements for continuing education and workforce training programs are different from those described in this section. Contact the Workforce Development Office for more information.

Registration for Classes

After the above requirements are met and the required procedures completed, students may register for credit classes. Consult with your advisor or educational and career specialist and review the TSTC course schedule for more information on these classes. Contact Workforce Development Office for registration information for continuing education and workforce training programs.

Tuition and Fees

A college education is one of the most important investments a person can make. TSTC is committed to providing access to everyone who can benefit from such an education.

The cost of attending TSTC varies depending on a variety of factors, such as a student’s residency status, whether or not the student lives on campus, the program of study, and any other services that the student may need. The Financial Assistance section of this catalog defines the types of financial aid that may be available to help pay these costs. This assistance can help provide the financial support students need for tuition, housing, books, and other educational items. It is not intended to completely fund a student’s education.

The tuition and fee information in this catalog is subject to change without notice.

Tuition

A student’s tuition is determined by residency status, the number of hours taken, and whether the courses are for college credit or for continuing education or workforce training.

State Tuition Rates 2009-10
- Resident of Texas: $70.00 per semester credit hour
- Non-resident of Texas: $188.00 per semester credit hour

Designated Tuition Rate 2009-10
- $34 per semester credit hour

As defined by the Texas Higher Education Coordinating Board, a resident of Texas is a citizen, national, or permanent resident of the United States or an alien (foreign or international student) who has been permitted by Congress to adopt the United States as his/her domicile while in this country and who has otherwise met the state requirements for establishing residency for tuition purposes. In Texas, students enrolling in an institution of higher education must have resided in Texas for the 12 months immediately preceding the time of enrollment to be classified as a resident for tuition purposes; otherwise, they are classified as non-residents. Certain non-U.S. citizens who have resided in Texas for at least 36 months and have graduated from a Texas high school may be considered for classification as a resident for tuition purposes. Contact the Admissions and Records Office for more information regarding the residency of minors, dependents, members of the armed forces, or other special circumstances.

Tuition Rebate for Certain Undergraduates

In accordance with State law, a qualified student is eligible for a rebate of a portion of the undergraduate tuition the student has paid if the student:
1. is awarded a baccalaureate degree from a Texas public general academic teaching institution;
2. has attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree, including transfer credits and course credit earned exclusively by examination; and
3. has been a resident of Texas and entitled to pay resident tuition at all times while pursuing the degree.

The amount of the rebate is $1,000 or the amount of undergraduate tuition paid by the student to the institution awarding the degree, whichever is less. If the student paid additional undergraduate tuition to other Texas public institutions of higher education, the student may qualify for an additional rebate by providing the degree-granting institution with proof of such payments. In any case, the amount of the rebate is a maximum of $1,000.

A student who has transferred from another institution of higher education must provide the degree-granting institution with an official transcript from each institution attended so that the total number of hours attempted by the student can be verified.

If the student has an outstanding student loan, including an emergency loan, owed or guaranteed by the State, including the Texas Guaranteed Student Loan Corporation, the degree-granting institution will apply the rebate to the student’s loan. If a student has more than one outstanding loan, the institution will apply the rebate to the loans as directed by the student. If the amount of the rebate exceeds the amount of the loan indebtedness, the student will receive the excess amount.

Information pertaining to the Tuition Rebate Program is presented to students during new student orientation. Additional information pertaining to the Tuition Rebate Program for undergraduate students may be found on the TSTC Marshall Website or may be obtained from the Admissions and Records Office.

The institutional contact for the Tuition Rebate Program is the Dean of Enrollment Management. 1-888-382-8782.

**Fees**

Students’ fees are determined by a variety of factors, as described in the accompanying table. Not all of these fees apply to continuing education and workforce training programs; contact Business Office for more information.

<table>
<thead>
<tr>
<th>TYPE OF FEE</th>
<th>AMOUNT OF FEE (2009-11)</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Resident E-Learning Fee</td>
<td>$222.00 per semester credit hour</td>
<td>For out-of-state residents enrolled in distance learning credit courses. Courses are exempt from all other state and designated tuition.</td>
</tr>
<tr>
<td>Testing Center Exam Fee</td>
<td>$25.00 per test session</td>
<td>Applies to the Accuplacer tests taken at TSTC Testing Centers; Challenge exam fee is $25/credit hour; both include fee for test administration.</td>
</tr>
<tr>
<td>Challenge Exam Fee</td>
<td>$25 per semester credit hour</td>
<td>Applies to the Accuplacer tests taken at TSTC Testing Centers; Challenge exam fee is $25/credit hour; both include fee for test administration.</td>
</tr>
<tr>
<td>Program-specific Fees and Costs</td>
<td>Varies</td>
<td>For some credit programs</td>
</tr>
<tr>
<td>Continuing Education/Workforce Training Fees and Costs</td>
<td>Varies</td>
<td>For some continuing education/workforce training courses</td>
</tr>
<tr>
<td>Out-of-State Resident and Worker Continuing Education Tuition</td>
<td>At least twice the continuing education tuition rate for the associated course-section</td>
<td>For non-residents who are brought from outside the state by their employers to attend the course</td>
</tr>
<tr>
<td>Credit Award Evaluation Fee</td>
<td>$25 per evaluation</td>
<td>Applies to evaluation of CEUs and/or experiential learning for the purpose of awarding TSTC semester credit</td>
</tr>
<tr>
<td>External Certification of Specialty</td>
<td>Varies</td>
<td>For students in allied health programs</td>
</tr>
<tr>
<td>Allied Health Malpractice Insurance</td>
<td>$14.50</td>
<td>Optional, unless required by program</td>
</tr>
</tbody>
</table>
| Student Medical Health and Accident Insurance | Varies                                        | 10 cents per book per day $1.00 per video or DVD per day
Lost item - cost of replacement plus a 10% processing fee |
| Library Fines                             | Varies                                        | For TSTC West Texas, Sweetwater, students living off campus           |
| Mailbox Fee                               | $5.00 per semester                            |                                                                      |
# Waivers and Exemptions

The tables in this section describe tuition waivers and exemptions for college credit courses. Students classified as Texas Residents for purposes of tuition assessment may be eligible to have all or part of their state tuition and/or designated tuition waived if they qualify for one of the waivers or exemptions. Contact the appropriate office for additional information and to determine eligibility.

## WAIVERS & EXEMPTIONS FOR RESIDENTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students who graduate early from a Texas high school</td>
<td>Financial Aid Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students who are the highest ranking graduate of their high school class (valedictorian)</td>
<td>Financial Aid Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>High school graduates who received AFDC benefits while in high school</td>
<td>Financial Aid Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Texas veterans or dependents of Texas veterans who were killed in action or died while in service (Hazlewood)</td>
<td>Financial Aid Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Children of POWs and MIAs as certified by the U.S. Department of Defense</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Children of disabled Firefighters or Peace Officers as certified by the Texas Higher Education Coordinating Board</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Blind or Deaf Students as certified by the Texas Rehabilitation Commission, the Texas Commission for the Blind, or the Texas Commission for the Deaf and Hard of Hearing (Blind or Deaf students are certified by the Department of Assistive and Rehabilitative Services - Rehabilitation Services, Blind and Deaf-Blind Services, and Deaf and Hard of Hearing Services.)</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students employed as Certified Educational Aides as authorized by the Texas Higher Education Coordinating Board</td>
<td>Financial Aid Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students in foster or other residential care as certified by the Texas Department of Protective and Regulatory Services</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
</tbody>
</table>

Students classified as Residents or Non-residents for purposes of tuition assessment may be eligible to have all or part of their state tuition and/or designated tuition waived if they qualify for one of the waivers or exemptions listed. Contact the appropriate office for additional information and to determine eligibility.

## WAIVERS & EXEMPTIONS FOR RESIDENTS OR NON-RESIDENTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school students enrolled in class sections for dual high school and college credit may have state and designated tuition waived or reduced.</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students enrolled in more than one Texas public institution of higher education at the same time may have a reduction in minimum state tuition charges.</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Senior citizens 65 years of age or older may audit courses without payment of state and designated tuition.</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Citizens 55 years of age or older may have state tuition waived upon verification of age.</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>TSTC employees, their spouses and/or dependents have a reduction in state tuition and a waiver of designated tuition.</td>
<td>Admissions and Records Office Administration/Admission Building 1-888-382-8782</td>
</tr>
</tbody>
</table>

Students classified as Non-residents of Texas for purposes of tuition assessment may be eligible to pay resident rates if they qualify for one of the waivers or exemptions listed. Contact the appropriate office for additional information and to determine eligibility.
<table>
<thead>
<tr>
<th>WAIVERS &amp; EXEMPTIONS FOR NON-RESIDENTS</th>
<th>OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military personnel stationed in Texas and their spouses and children</td>
<td>Admissions and Records Office</td>
</tr>
<tr>
<td></td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Individuals employed at least half time as teachers or professors at Texas institutions of higher</td>
<td>Admissions and Records Office</td>
</tr>
<tr>
<td>education and their spouses and children</td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Individuals employed at least half time as teaching or research assistants at Texas institutions</td>
<td>Admissions and Records Office</td>
</tr>
<tr>
<td>of higher education and their spouses and children</td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students whose families transferred to Texas as a part of the State’s plan for economic development.</td>
<td>Admissions and Records Office</td>
</tr>
<tr>
<td>Employer company must be certified as eligible by the Texas Higher Education Coordinating Board</td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students who receive a competitive scholarship of at least $1,000</td>
<td>Financial Aid Office</td>
</tr>
<tr>
<td></td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students who reside in a county or parish of Arkansas, Louisiana, New Mexico, or Oklahoma that</td>
<td>Admissions and Records Office</td>
</tr>
<tr>
<td>is adjacent to Texas where a current reciprocity agreement is in effect with a college or university in the out-of-state county or parish, Louisiana residents (statewide) are included but applies only to enrollment at TSTC Marshall</td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students from Mexico or Canada enrolled through a Texas Higher Education Coordinating Board approved Exchange Program</td>
<td>Admissions and Records Office</td>
</tr>
<tr>
<td></td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Students from Mexico who demonstrate financial need</td>
<td>Financial Aid Office</td>
</tr>
<tr>
<td></td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
<tr>
<td>Nonimmigrant aliens residing in Texas in accordance with NATO treaties and their spouses and children</td>
<td>Admissions and Records Office</td>
</tr>
<tr>
<td></td>
<td>Administration / Admission Building 1-888-382-8782</td>
</tr>
</tbody>
</table>

Notes
Methods of Payment

Cash

All tuition and fees may be paid in cash.

Personal Checks

All tuition and fees may be paid by personal check. Students who pay by check at TSTC must present a valid TSTC identification card and a valid Texas driver's license. Checks from parents or legal guardians are to be made out to “Texas State Technical College.”

If a personal check does not clear the bank, the student will be notified and a $25.00 returned check fee will be assessed. The student will be required to pay the amount of the check and the returned check fee in cash or by money order, credit card, or cashier’s check, unless the check refusal was an error on the part of the student’s bank. A student who does not redeem a check promptly after being notified of its return is subject to referral to the College disciplinary committee and prosecution by civil authorities. A student who is responsible for a check that is returned because the account has been closed will face immediate prosecution. Checks written for the benefit of a student by a parent or legal guardian will be applied to the student’s account. TSTC Marshall does not cash personal checks.

Credit and Debit Cards

All tuition and fees of $10 or more may be paid by credit or debit card. Students paying with credit or debit cards may make payment online through WebAdvisor at http://my.tstc.edu

Installment Payment Plan

College credit students may pay their registration charges (state tuition and designated tuition), campus housing, and meal plans on an installment payment plan. In accordance with State law, these students may pay their state and designated tuition in installments for the fall and spring semesters and for summer terms.

In order to validate the payment plan option, the initial payment and the signed Installment Agreement must be returned to the Business Office at the time of registration. The payments are due as follows:

Fifteen-Week Term:
- 1/3 prior to the beginning of the term plus the $10 installment plan fee
- 1/3 prior to the 6th class week
- 1/3 prior to the 11th class week

Twelve-Week or Longer Term:
- 1/3 prior to the beginning of the term plus the $10 installment plan fee
- 1/3 prior to the 5th class week
- 1/3 prior to the 9th class week

Less Than Twelve-Week Term:
- 1/2 prior to the beginning of the term plus the $10 installment plan fee
- 1/2 before the class week prior to the halfway point of the term

A student who elects to pay in installments will:
1. pay a $10.00 installment plan fee;
2. be responsible for making payments on or before the due dates established at the time of registration;
3. be charged a late fee of $25.00 for each payment made more than seven business days after the payment is due;
4. be unable to obtain official copies of his/her student records until the debt is paid in full;
5. be at the risk of being dropped or barred from attending classes until the debt is paid or acceptable arrangements are made with the Business Office; and
6. be responsible for payment of any remaining balance if he/she withdraws from the College.

Emergency Tuition Loan

College credit students who are unable to pay their state and designated tuition at the time of registration because of financial hardship may be eligible for emergency tuition loans. A student who is unable to repay the emergency tuition loan on the date due may apply for a possible extension for repayment. Contact the Business Office for more information.
Housing

Single Student Housing

4-Bedroom, 1 bath
(4 occupants-private) ...............$1,195/semester/person

2-Bedroom, 1 bath
(2 occupants-private) ...............$1,389/semester/person

Apartments are furnished with twin bed, chest, desk and chair, local "analog" phone service, mini blinds, sofa, chair, coffee table, end table, bar stools, full-size stove, refrigerator, central heat and a/c; utilities included, specifically electricity, water, garbage pick-up, cable, wireless internet connections and on-site coin operated laundry facilities.

Fees Paid Only Once: Security Deposit - $150.00 ($50.00 is non-refundable) Residents are required to have a $150.00 deposit on their account at all times. Should charges for damages or fines be deducted from this deposit, residents are required to bring their deposit back up to $150.00.

Fees Paid Each Semester: Installment/Payment Set-Up Fee - $10.00
This fee is charged only if the rental fee is not paid in full at the beginning of the semester and the student has elected an installment payment plan. The payment installment plan allows the student to pay one-third the total housing charges prior to the beginning of the semester with the remaining balance paid in 2 equal installments during the semester.

Handicap accessible apartments are available. Applicants must register with the Student Counselor to request special accommodations. Special needs must be indicated on the housing application.

Refunds

Refunds for Changes in Enrollment

The following definitions apply when calculating refunds for changes in course enrollments.

- **Reduction in course load** occurs when a student drops a course(s) having more credit hours than he/she adds, resulting in the student being enrolled in fewer credit hours overall.

- **Withdrawal** occurs when a student completely ends his/her enrollment at the College for the current term.

- **Credit courses** are courses for which a student is eligible to earn semester credit hours toward an institutional award, certificate or associate degree. Credit courses also include support courses required for the student’s enrollment, such as developmental education, etc.

Refunds for Drops/Reduction in Course Load

Students who drop credit courses and reduce their course loads while remaining enrolled at the College will have their state and designated tuition refunded, based on the official drop date recorded by the Admissions and Records Office. Students who concurrently add and drop the same number of credit hours will not be charged or refunded for these simultaneous transactions.

Refunds for semester credit courses are calculated using a formula based on the number of weeks scheduled for a term or class. Students who are enrolled in semester credit hour courses who drop a class or withdraw from school prior to the first class day will receive a 100% refund. Students in semester credit hour courses who officially withdraw from school or drop a course after classes begin will have their state and designated tuition and fees refunded according to the following schedule unless the fees are specifically designated as non-refundable.

<table>
<thead>
<tr>
<th>Length of Class Term in Weeks</th>
<th>Last Class Day for 70 Percent Refund</th>
<th>Last Class Day for 25 Percent Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 or less</td>
<td>2</td>
<td>n/a</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>14</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>15</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>16 or longer</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>

Class days are defined as calendar days during which classes are normally scheduled and not the specific days a particular class.
Refunds for Federal Financial Aid Recipients

Special refund requirements apply to students who receive federal aid that is classified as “Title IV” funds. Title IV funds include awards such as Federal Pell grants, Federal Supplemental Educational Opportunity grants (SEOG), William D. Ford Federal Direct Loans and Federal Stafford loans, Perkins loans and PLUS loans, and other federal awards. Students must attend classes to remain eligible for federal financial aid. Students who are considering withdrawing from all classes before completing 60% of the semester should contact Financial Aid Office to learn how this would affect their financial aid.

If a student reduces a course load or withdraws from TSTC, the College and/or the student may be required to return federal funds awarded to the student. The student may be eligible for a refund of a portion of the state and designated tuition paid to TSTC for that term. If the student received financial assistance, the refund is returned to the grant, scholarship, or loan sources from which the assistance was received.

A federal formula dictates the amount of Title IV aid that must be returned to the federal government by the College and the student. This formula applies to a student who is receiving Title IV funds if that student withdraws from the College on or before the 60% point in time in the term. The percentage of Title IV aid to be returned is equal to the number of calendar days remaining in the term divided by the number of calendar days in the term. Scheduled breaks of five consecutive days or more are excluded from this calculation.

If any funds are to be returned after the refund of Title IV aid, they are used to repay TSTC funds, state funds, and other private sources. If there is an unpaid balance, then all aid sources are repaid before any funds are returned to the student. Funds released to a student due to a credit balance on the student’s account do not relieve the student’s obligation to repay Title IV funds when the student withdraws.

Order of Return of Title IV funds

A school must return the Title IV funds to the programs for which the student received aid during the payment period or period of enrollment as applicable, in the following order, up to the net amount disbursed from each source:

1. Unsubsidized Federal Stafford loans
2. Subsidized Federal Stafford loans
3. Unsubsidized Direct Stafford loans (other than PLUS loans)
4. Subsidized Direct Stafford loans
5. Federal Perkins loans
6. Federal PLUS loans
7. Direct PLUS loans
8. Federal Pell Grants for which a return of funds is required.
9. Academic Competitiveness Grants for which a return of funds is required.
10. National Smart Grants for which a return of funds is required.
11. Federal Supplemental Educational Opportunity Grants (FSEOG) for which a return of funds is required.
12. Other Title IV
13. Other Federal, State, Private, or Institutional Aid
14. The Student

For more detailed information on the entire refund procedures for Financial Aid students or about the calculation of refund amounts, contact the Financial Aid Office.

Bookstore Refunds

Textbook Refunds

Conditions for Return or Exchange are as follows:

1. TSTC Marshall Bookstore receipt required for all returns and exchanges.
2. A 20% restocking fee will be assessed for returns and/or exchanges without a schedule change.
3. Exchanges only (no returns) allowed during first class week.
4. No refunds, returns or exchanges after 9 days from purchase date or 9th class day, whichever occurs first, no exceptions.
5. To obtain a full refund, books must be in new condition. Any markings other than the original price tag and/or the removal of shrink-wrap will deem the book used.
6. Any refunds after the official census date will require the presentation of a TSTC Marshall cash register receipt and accompanied by a valid, completed drop slip. Refunds under this circumstance will be 50% of qualified receipt price. Census information is available at the TSTC Marshall Admissions and Records Office.
7. The bookstore will determine whether returned books are in new or used condition.
8. Special orders or books other than textbooks are not returnable.
9. Exchanges only will be made for defective books provided they are currently being used in class.

Tools, supplies, and notions are non-refundable, unless they are defective. If they are defective, the items must be returned within two weeks of purchase and must be accompanied by the sales receipt in order to receive a refund. Additional, more
specific information is available by visiting our website: http://www.marshall.tstc.edu/. Click current students; bookstore refunds.

Textbooks purchased after refund period are ineligible for refunds.

Adult Continuing Education books must be returned within 3 days of purchase. Book condition rules apply.

**Housing Refunds**

Up to $100.00 of the Housing Security deposit may be refunded after the student moves from his/her apartment and after the following conditions have been met: room inspection; clearance with the Housing Office; return of all keys; and fulfillment of lease agreement. No reduction in fees can be made for late entry during a registration period. Students who vacate housing at any time prior to the end of the semester continue to be responsible for payment of the entire semester’s rent according to the terms of the lease agreement. A portion of the security deposit may be refunded if the semester rent has been paid in full and certain other conditions are met (see “Housing”) in the Housing section of this catalog.

If housing is not available, the security deposit will be refunded. In the event you do not attend TSTC, submit a written notice to the Housing Office at least 30 days prior to the first day of class in order to obtain a deposit refund. Approximately four weeks are required to process refunds. The security deposit is forfeited unless the payments for the entire contract period have been paid in full.

There are limited reasons that a student may break a lease agreement. Should circumstances arise that would necessitate a cancellation, the student will need to contact the Housing Office/Associate Dean of the Learning Community. Even with an approved reason, students must comply with the proper check-out procedures before the agreement can be terminated.

**Refunds of Other Fees**

No refunds are given for installment plan fees. No refunds are given for health insurance, malpractice insurance, and other miscellaneous student-requested fees after expenses have been incurred by the college.

**Financial Assistance**

TSTC’s philosophy is to provide financial assistance to students who would otherwise be unable to pursue a postsecondary education. However, the primary responsibility for paying the cost of a college education rests with the student and his/her family. Funds are available through the Financial Aid Office to supplement those resources. TSTC Financial Aid Office staff are available to assist students with financial aid questions and concerns.

Several types of financial assistance are available to TSTC students. These include grants, which are free money awarded to students with the most financial need and which do not have to be repaid; scholarships; part-time on-campus or community service employment; and loans, which must be repaid.

**Applying for Financial Assistance**

**When to Apply**

The key to obtaining financial assistance is to apply early. To ensure that an aid package is available and ready, TSTC recommends the completed file be received in the Financial Aid Office according to the following schedule:

- **To enroll in the:**
  - Fall term: Apply for financial assistance by May 1
  - Spring term: Apply for financial assistance by October 1
  - Summer term: Apply for financial assistance by March 1

Applications completed by these deadlines are processed for available funds on a first-come first-served basis. Late applicants may not have funds available on registration day, when payment for state and designated tuition is due.

Since financial assistance is not always available at registration, it is recommended that students make alternative arrangements to pay registration expenses. Contact the Financial Aid Office for information on emergency loans.

**How to Apply**

These are the first steps in applying for financial assistance.

1. Complete the FAFSA through the Internet at www.fafsa.ed.gov. For more information regarding this, contact Customer Service at 1-800-801-0576.

   or

2. If you would like the TSTC Financial Aid Office to assist
you in submitting your FAFSA electronically, please take the following to that office:

a) completed FAFSA

b) Additional documentation if your file contains conflicting information or if your file is selected for verification by the U.S. Department of Education.

3. You will receive an Electronic Student Aid Report (ESAR) in the mail or email from the processing center in approximately four to six weeks. Review the ESAR for accuracy and report any discrepancies to the TSTC Financial Aid Office immediately.

4. Officially declare a major to the TSTC Admissions Office and complete the admissions process. Undeclared majors are not eligible for financial aid.

5. Pre-register according to College registration dates and guidelines. If you register early, your financial aid will be credited to your student account prior to the start of the term.

Additional steps may be required to apply for some types of financial assistance. For example, a separate loan application may be needed, since promissory notes go to the lenders. and certain programs of study require additional documentation before financial assistance applications are processed. Contact the Financial Aid Office for more information and assistance.

Types of Financial Assistance

A variety of resources are available for financial assistance at TSTC. Some of these are included in the following list. Contact the Financial Aid Office for more complete information and assistance.

- **Federal Pell Grant.** This federal aid program provides financial assistance for obtaining a postsecondary education. It is intended to be the base of a student’s financial aid package. Eligibility is based on a student’s financial need.

- **Federal Supplemental Educational Opportunity Grant (FSEOG).** This federal aid program helps college students who have exceptional need. The amount of the FSEOG varies according to the availability of other grants, scholarships, loans, and student employment. FSEOG funds are limited and are awarded on a first-come first-served basis.

- **Texas Public Education Grant (TPEG).** This state program provides financial assistance in obtaining a postsecondary education. Eligibility is based on a student’s financial need.

- **Toward EXcellence, Access & Success (TEXAS).** These state awards pay state and designated tuition for certain students who have graduated from Texas public or accredited private high schools within the preceding 16 months. Students must have completed the recommended or advanced high school curriculum and be able to show financial need. Students who do not meet the criteria for the TEXAS Grant may be eligible for the Texas Grant II.

- **Leveraging Educational Assistance Programs (LEAP, SLEAP).** Priority for these awards is given to full-time students with financial need. Within this group, priority is given to students whose complete files are in the Financial Aid Office by the application deadline. Funds are disbursed only during the fall term and are awarded on a first-come, first-served basis.

- **Federal and State Work-Study Program (FWSP).** Work-study programs are designed to stimulate and promote part-time on-campus employment of students, particularly those who need financial assistance. Funds are available to the College to help create job opportunities for eligible students; however, these funds are limited and students must apply early.

- **Federal Loans.** Various types of federal loans are available, including the Federal Direct Subsidized, Federal Direct Unsubsidized, and Federal Direct Parent Loan. To be certified for a loan, students must first apply for the Federal Pell Grant, as described earlier in the Financial Assistance section. Because changes occur frequently in federal regulations, call or visit the Financial Aid Office for details regarding loan amounts, eligibility criteria, repayment responsibilities, etc.

- **Federal Academic Competitiveness Grant (ACG).** The ACG is available to undergraduate students who have successfully completed a “rigorous secondary school program of study.” Eligibility is determined upon TSTC’s receipt of the processed FAFSA. Student should complete and file the FAFSA.

- **Department of Assistive and Rehabilitative Services.** The Department of Assistive and Rehabilitative Services (DARS), provides financial assistance to students whose significant physical or mental disabilities have resulted in substantial vocational disabilities. Learning disorders are among the eligible conditions. In order to provide training assistance, DARS must determine that such training is necessary for employment and that the individual has a good chance of success in the chosen program. Applicants must submit an application and be tested and counseled before eligibility is determined.
The amount of DARS assistance depends on available funds and individual need. A full-time DARS representative is available to assist DARS clients while attending TSTC. Contact your local Department of Assistive and Rehabilitative Services office for an application and more information.

- **Trade Adjustment Assistance (TAA).** The Trade Adjustment Assistance (TAA) Program is a federal program established under the Trade Act of 1974, as amended. The TAA Program provides aid to workers who lose their jobs or whose hours of work and wages are reduced as a result of increased imports. Interested applicants should contact the Texas Workforce Commission Office in the county of their residence.

- **Workforce Investment Act (WIA).** The Workforce Development Board in your area may offer payment of tuition and/or other expenses to students who qualify for this program. Interested applicants should contact the nearest Workforce Center or call 1-800-457-5600 or 1-800-457-5633. Applications for the program should be made as far in advance of registering as possible.

- **Veterans’ Benefits (G.I. Bill).** TSTC is approved for training veterans and their eligible dependents under the provisions of various laws commonly called the G.I. Bill. A veteran with remaining entitlement may receive a monthly check, which varies in amount based on class load and the type of eligibility that the veteran has. Fees and tuition are paid by the student at registration. A spouse or child of a veteran may receive benefits under certain conditions. The DD-214 form and all official college, university and military transcripts may be required. Veterans who are eligible for assistance under any of the Department of Veteran’s Affairs programs should contact Admissions and Records Office.

## Scholarships

Each year a number of individuals, businesses, and organizations provide scholarships for TSTC students. These allow students to be recognized for their hard work, as well as for their need for assistance. Most of these scholarships, which vary in amount, are available to students after they complete one or two terms. A partial listing of TSTC scholarships is included in the accompanying table. Contact the Financial Aid Office for additional information and a complete list of available scholarships.

## Waivers and Exemptions

TSTC is authorized to grant tuition and fee waivers to qualified resident and non-resident students based on Texas Higher Education Coordinating Board rules. For details, see “Tuition Waivers and Exemptions” in the Tuition and Fees section of this catalog.

## Maintaining Financial Aid Eligibility

To remain eligible for financial aid, a student must meet the Standards of Academic Progress for Financial Aid, which are different from those described in “Scholastic Standing” in the Scholastic Information section of this catalog. A student’s scholastic records are reviewed at the end of each term to determine if he/she is making satisfactory progress. This review includes all periods of the student’s enrollment, even those for which the student did not receive financial aid.

Students receiving financial aid must continually be aware of their grades. A student who is placed on financial aid probation or suspension may be notified in writing by the Financial Aid Office; however, failure to receive such notification does not change the student’s financial aid status.

## Financial Aid Standards of Academic Progress

Students must maintain at least a 2.0 Financial Aid Grade Point Average (GPA) in each term for which aid is approved and must also maintain at least a 2.0 Financial Aid Cumulative GPA for all courses taken. Both credit and developmental education courses are included in these calculations. Transfer students begin enrollment at TSTC in good standing and their progress is monitored from that point on. See “Grade Point Averages” and “Scholastic Standing” in the Academic Information section for more details.

In addition, students must successfully complete the number of credits outlined in the following chart, based on the hours they attempt each term. Successful completion means a student has received a minimum grade of D. Courses in which students receive grades of F, IP (in progress), and W (withdrawal) are not considered completed courses. See “Grading Standards” in the Academic Information section of this catalog.

<table>
<thead>
<tr>
<th>Credit Hours Attempted:</th>
<th>Minimum Credit Hours to be Completed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 12 credit hours</td>
<td>75%</td>
</tr>
<tr>
<td>9 to 12 credit hours</td>
<td>8 credits</td>
</tr>
<tr>
<td>6 to 8 credit hours</td>
<td>6 credits</td>
</tr>
<tr>
<td>Less than 6 credit hours</td>
<td>100%</td>
</tr>
</tbody>
</table>

Students enrolled in required remediation (developmental education) as indicated by testing or as recommended by counseling, may receive financial aid for no more than 27 semester hours of remedial courses. All remedial courses attempted, including failures, incompletes, and withdrawals are counted toward the 27-semester hour maximum.
Courses that are repeated are not funded, unless the courses are needed to meet graduation requirements. Audited courses, continuing education courses, workforce training courses, and those courses for which a student enrolls after the official class day are not considered for funding.

**Failure to Meet Financial Aid Standards of Academic Progress**

The first time a student fails to meet the financial aid standards of academic progress, he/she is placed on financial aid probation for the next term of enrollment.

The student remains on probation if he/she subsequently earns a Financial Aid Cumulative GPA of less than 2.0 and has a Financial Aid Term GPA of 2.0 or higher. A student who fails to meet the standards of academic progress during the probation term is placed on financial aid suspension. Applications for financial aid, including loans, are not certified while a student is on financial aid suspension.

To regain eligibility for financial aid, the student must enroll at TSTC on at least a half-time basis for one term, pay the expenses related to that enrollment, and attain the financial aid standards of academic progress. After this is achieved, the student is again eligible to apply for financial aid.

**Appeal Process Related to Standards of Academic Progress**

If there are mitigating circumstances, a student who has been denied financial aid because of failure to meet the financial aid standards of academic progress may file a written appeal to the director of financial aid. A student may have only one appeal granted while he/she is at TSTC.

**Maximum Time Frame for Receiving Financial Aid**

Students may receive financial assistance for up to 150 percent of the certificate or degree programs’ required credit hours. Students who change programs or who enter new programs after graduation should consult with the Financial Aid Office to confirm their continuing eligibility for financial aid.

**Refunds for Financial Aid Recipients**

Refunds for financial aid recipients depend on the students’ withdrawal dates. For example, students withdrawing before the 60% date of the semester may owe the College money. For more information, see “Refunds for Federal Financial Aid Recipients” in the Refunds section of this catalog.
Scholastic Information

Grading Standards

TSTC measures student achievement of skills, knowledge, and competencies through a system of grading standards. Four grades (A, B, C, D) indicate that credit was received and a grade was awarded. One mark (CR) indicates that credit was received but no grade was awarded. One grade (F) and various other marks indicate that no credit was received and no grade was awarded.

The following system of final grades and marks is used by TSTC to report student performance for each course attempted and/or credited toward graduation.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interpretation</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent/Superior Performance Level</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Above Required Performance Level</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Minimum Required Performance Level</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Below Required Performance Level</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure to Meet Performance Requirements</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Pass/Meets Required Performance Level</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>In Progress (For use when a student has not had sufficient time to complete the course due to the registration date, extended illness, or other circumstances beyond the student’s control. A grade of IP will be changed to a grade of F if the student does not complete the course requirements by a date specified by the faculty member or within one year, whichever is less.)</td>
<td>Not Computed</td>
</tr>
<tr>
<td>IM</td>
<td>Incomplete-Military Leave (For use by students who are called to active military service near the end of a term. A grade of IM will be changed to a grade of W if the student does not complete the course requirements within two years of the date the IM grade was awarded.)</td>
<td>Not Computed</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>Credit (represents credit for courses that are accepted toward program completion and graduation as a result of transfer from other institutions or programs, advanced standing evaluation, credit by examination, articulation agreements, or other validations of course-required knowledge and skills)</td>
<td>Not Computed</td>
</tr>
<tr>
<td>AUD</td>
<td>Audit of Course</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory (for use in Continuing Education courses and programs)</td>
<td></td>
</tr>
<tr>
<td>UN</td>
<td>Unsatisfactory (for use in Continuing Education courses and programs)</td>
<td></td>
</tr>
</tbody>
</table>

X     No Grade Assigned..................................Not Computed
FA    Failing (prior to September 1988).........................0
I     Incomplete (prior to September 1988)........................Not Computed
U     Unsatisfactory (prior to September 1988)....................0
WF    Withdrew Failing (prior to September 1988).................0
WP    Withdrew Passing (prior to September 1988)..................Not Computed

Grade Point Averages

Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. For example, a student who takes a three-hour course and earns an “A” accumulates 12 grade points for that course (3 hours x 4 points for an A = 12 points). A student’s grade point average is computed by adding the grade point values for all college-level courses for which grade point values may be computed (A, B, C, D, F, FA, U, WF), and dividing this total by the number of credit hours attempted during the same period. Only hours for which grades are awarded are used in calculating the grade point average (GPA).

Term Grade Point Average

The Term GPA is computed for all TSTC college-level courses with grades of A, B, C, D, and F recorded during a specific term. Developmental education courses are excluded from the Term GPA calculation.

Cumulative Grade Point Average

The Cumulative GPA is computed for all TSTC college-level courses using all grades and grade points earned since enrolling at TSTC. Developmental education courses are excluded from the Cumulative GPA calculation. The Cumulative GPA is used to qualify students for graduation and for graduation honors.

Standards of Progress Grade Point Average

A Term and Cumulative Standards of Progress GPA is computed using all TSTC college-level and developmental education courses. The Standards of Progress GPAs are used for determining scholastic standing, term scholastic honors and financial aid eligibility. See “Financial Aid Standards of Academic Progress” in the Financial Aid section for more information.

Scholastic Standing

TSTC’s scholastic standards are based on a philosophy of advancing student progress toward successful course and program completion. The criteria for scholastic standing are designed to monitor student progress so that faculty and staff can intervene and assist students who have difficulty meeting minimum requirements.
Scholastic standing is computed at the end of each enrollment period and is based on the Standards of Progress (SOP) Term and Cumulative GPAs.

**Good Standing**

A student who maintains 2.00 or higher SOP Cumulative and Term GPAs at the end of each enrollment period is in good scholastic standing.

A student who does not maintain this minimum is placed on scholastic alert, scholastic probation, or scholastic suspension. These three scholastic levels alert faculty and staff to problems in the student’s scholastic performance so that appropriate intervention and assistance can be provided.

**Scholastic Alert**

A student in good standing whose SOP Cumulative or Term GPA is below 2.00 at the end of an enrollment period receives a scholastic alert. Scholastic alert is an early warning for the student to meet with a counselor or advisor prior to registration for assistance with academic problems. A student continues on alert status by achieving a SOP Term GPA of 2.00 or higher at the end of the enrollment period. A student is removed from scholastic alert when the SOP Cumulative and Term GPAs are 2.00 or higher.

**Scholastic Probation**

A student whose SOP Cumulative and Term GPAs fall below 2.00 at the end of a scholastic alert enrollment period is placed on scholastic probation. A student may continue on scholastic probation by achieving a SOP Term GPA of 2.00 or higher at the end of the enrollment period. A student is removed from scholastic probation when the SOP Cumulative and Term GPAs are 2.00 or higher.

Scholastic probation is a serious warning that the quality of the student’s work must improve in order for the student to continue enrollment at TSTC. Students on scholastic probation are required to meet with a counselor or advisor prior to registration and may be required to enroll in special programs or courses. After counseling with appropriate college staff, the student may be permitted to enroll in a new program.

**Scholastic Suspension**

Scholastic suspension occurs when a student on scholastic probation fails to maintain minimum academic standards. A student on scholastic probation who fails to achieve a SOP Term GPA of 2.00 or higher is suspended for the next enrollment period. A suspended student may appeal for a waiver of the suspension to the instructional dean or his/her designee. A student on scholastic suspension is permitted to reapply for enrollment after one term. A student who re-enters the college after having been suspended is placed on scholastic probation and is subject to the minimum requirements governing scholastic probation.

**Scholastic Honors**

Full-time students (those enrolled for 12 or more credits) who earn SOP Term GPAs of 4.0 are placed on the President’s List. Full-time students who earn SOP Term GPAs of 3.5 to 3.99 are placed on the Dean’s List.

**Grade Reports**

Students are expected to monitor their academic progress. Final grade reports are provided to students at the end of each term on the TSTC Web site via WebAdvisor at http://my.tstc.edu. Students should review the grade reports for accuracy. All requests for review or correction must be submitted to the Admissions and Records Office within 12 months of the close of the semester in which the course was taken.

**Grade Changes**

Student grades are among the most important records kept by the college. Policies and procedures ensure the privacy and integrity of student grade records and, at the same time, provide students a process to appeal final course grade decisions. The following policies and procedures must be followed to request a grade change.

- A grade change must be requested within one year of the issuance of a grade.
- A grade may be changed due to an error, a student completing course work previously graded “IP” (In Progress), or a fact-supported finding by appropriate members of the administration or appeal committee operating in accordance with established college procedures.
- A grade cannot be changed to a “W” (Withdrawal) unless doing so is in conjunction with an administrative drop or withdrawal from the College that is approved in accordance with college procedures.
- A change of grade form must be completed, noting the reason for the grade change, and signed by the student’s instructor and the Program Chair.
- Upon receipt of the completed and signed grade change form, the Admissions and Records Office makes the official change to a student’s transcript record.
- A copy of the change of grade form is placed in the student’s permanent file for audit purposes.

**Transcript of Credit**

The transcript of credit is an official statement of the student’s complete academic record accumulated at TSTC. Upon a written or Web request to any TSTC college, the Admissions and
Records Office will release official transcripts to the student or to a third-party that is authorized by the student to receive the transcript. Normally, the minimum time for processing such requests is 24 hours; however, transcripts requested at the end of a term require approximately one week for processing. Students who request transcripts prior to the end of a term, with current courses and grades to be included in the transcripts, must clearly note the current work as part of the request.

Official transcripts may be withheld if any financial obligations to TSTC have not been paid or if official transcripts have not been received from previously attended institutions. Students who have not complied with all exit requirements will not be provided with transcripts.

**Classification**

Students are classified as freshmen if they have earned less than 30 hours of college credit. They are classified as sophomores if they have earned 30 to 72 hours of college credit.

**Course Load**

Students in good standing may register for course loads equivalent to those specified in their instructional programs.

Students may register for less than normal loads but must register for a minimum of 12 credits to be considered full-time. Students who are making unsatisfactory progress or carrying excessive outside work may be required by department chairs or advisors to register for less than normal loads.

Students may register for up to 18 credits with the approval of the faculty advisor. Enrollment for more than 18 credits requires approval of the department chair.

**Assessment and Testing Requirements**

Before enrolling at TSTC, all students must either present scores on an approved Texas Success Initiative (TSI) test, present evidence of TSI completion from another Texas college or university, or present proof that they are exempt from the TSI requirements (see “Test Exemptions”). Additional placement testing may be required for entry into specific courses or programs.

Before receiving an Associate Degree, all students must complete TSI requirements as specified in the TSTC Texas Success Initiative Plan. In general, students may meet TSI standards by completing the capstone developmental education courses with a grade of C or better in the skill areas of reading, writing, and mathematics, by participating in and completing a developmental education activity specified on the students’ individual TSI plans, or by re-testing and passing an approved TSI test. Additional information regarding TSI completion requirements may be obtained from the Testing Office.

Students who are not exempt from TSI requirements and who do not obtain passing scores on the appropriate tests must adhere to the following.

- **Associate of Applied Science Degree programs:** must participate in developmental education programs during each enrollment period until TSI requirements are met.
- **Level II Certificate programs (43 or more semester credit hours):** may be required to participate in developmental education programs.
- **Level I Certificate programs (42 or less semester credit hours):** may be required to participate in developmental education programs.

Students who enroll first in a Level I Certificate program and then change to a Level II Certificate or an Associate of Applied Science Degree program must meet the requirements of the new program.

**Test Standards**

The following table provides the minimum passing scores on approved TSI tests.

<table>
<thead>
<tr>
<th>Test</th>
<th>Reading</th>
<th>Writing</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA</td>
<td>230</td>
<td>220</td>
<td>230</td>
</tr>
<tr>
<td>Accuplacer</td>
<td>78</td>
<td>80 with Essay Score = 5</td>
<td>63</td>
</tr>
<tr>
<td>Compass</td>
<td>81</td>
<td>59 with Essay Score = 5</td>
<td>39</td>
</tr>
<tr>
<td>Asset</td>
<td>41</td>
<td>40 with Essay Score = 5</td>
<td>38</td>
</tr>
<tr>
<td>Writing Essay</td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Test score information is subject to change. Confirm required scores at the Testing Office.

Students with disabilities will take a test approved for TSI purposes with appropriate accommodations.

Non-native English speakers are required to be assessed in reading, writing, and math skills. An alternative test such as TOEFL may be used to determine the level of English proficiency. Depending upon scores, students will be enrolled in non-credit English as a Second Language (ESL) courses, academic ESL courses, developmental courses in reading and math, and/or college-level courses as appropriate until such time as their English proficiency allows testing on an approved TSI instrument. Contact the Testing Office for additional information.
TSI Testing Schedule

The THEA test and other approved TSI tests are administered at each TSTC college on a variety of schedules. Check with the Testing Office for specific dates and times. Some tests may be available on computer, as well as on paper.

Special test accommodations are made for students with disabilities if such accommodations are requested at registration and before the appropriate deadline.

Non-Passing Scores

Students who test below the minimum passing standards will be assigned to an individual TSI plan which will provide specific course and/or non-course activities for completing TSI requirements.

There are no restrictions on the number of times students may retake a TSI approved test in order to achieve passing scores. However, it is in students’ best interest to complete the developmental education program or activity specified on their individual TSI plans for the sections of the test they have failed before they retake the test.

Students who do not achieve passing scores on their first attempt complete TSI standards and may satisfy requirements for each skill area in reading, writing and mathematics with any of the following methods:

1. Complete the capstone developmental education course with a grade of C or better for a specific skill area. The capstone developmental education courses are:
   
   READ 0200, Reading Skills II
   WRIT 0200, Writing Skills II
   DMTH 0200, Intermediate Algebra

2. Re-test on an approved TSI test in a specific skill area and achieve a passing score. Contact the Testing Office for information on specific college procedures and schedules for testing and re-testing.

3. Achieve a mastery level in PLATO for a specific skill area. Contact the Developmental Education Department for information on PLATO. (Not available at all TSTC colleges).

4. Complete the specific developmental activity prescribed on the individual student TSI plan.

TSI Test Exemptions

1. Students who meet the following score standards for ACT, SAT, or TAKS tests may be exempt from TSI requirements in a specific skill area if the tests have been taken within the approved time frame. Students must provide official scores to the Testing Office prior to enrollment in order to qualify for this exemption.
   
   • ACT: composite score of 23, combined with a minimum of 19 on the English and/or the mathematics tests; test date no more than five years prior to enrollment
   • SAT: combined verbal and math score of 1070, with a minimum of 500 on the verbal and/or mathematics tests; test date no more than five years prior to enrollment
   • TAKS: minimum score of 3 on the writing essay test and 2200 on the English Language Arts test, and/or 2200 on the math test, and test date no more than three years prior to enrollment.

2. Students who have graduated with an associate’s or higher degree from a Texas public institution of higher education are not required to take a TSI test. Students are responsible for providing official transcripts from the degree-granting institution.

3. Students who have completed TSI requirements or have been exempted at another institution of higher education are exempt from testing requirements provided an official transcript is submitted which indicates TSI completed status.

4. Students from private or out-of-state institutions of higher education who have completed college-level coursework equivalent to TSTC’s TSI Academic Core Component Courses are exempt from testing requirements provided official transcripts are submitted.

5. Students who are retired or have been honorably discharged from active duty in the armed forces of the United States, the Texas National Guard or a reserve component of the armed forces of the United States on or after August 1, 1990 are exempt from testing requirements. Appropriate documentation of status is required.

6. Students currently serving on active duty in the armed forces of the United States, the Texas National Guard, or service in a reserve component of the armed forces of the United States with at least three years service prior to enrollment at TSTC are waived from testing requirements. Students on active duty must present a letter from their commanding officer or current duty papers for each semester of enrollment.

Testing and remediation policies are subject to change without notice. Contact the Testing Office for more information

TSI Core Component Courses

TSTC has designated the following academic courses as a core component courses for TSI reporting. Students who transfer from regionally accredited institutions of higher education
with grades of C or higher in courses that are equivalent to these TSTC courses will be considered to have satisfied TSI requirements. Students must submit official transcripts indicating successful completion of these courses.

**WRITING**
- ENGL 1301 Composition I
- ENGL 2311 Technical & Business Writing
- ENGL 2314 Technical & Business Writing I

**READING**
- GOVT 2301, 2302 U.S. Government
- HIST 1301, 1302 U.S. History
- HUMA 1301 Introduction to Humanities
- PSYC 2301 General Psychology
- SOCI 1301 Introduction to Sociology

**MATHEMATICS**
- MATH 1314 College Algebra
- MATH 1316 Plane Trigonometry
- MATH 1332 College Mathematics
- MATH 1333 Math for Liberal Arts

**Advising**
TSTC believes advising is essential to student success, and, therefore, the College supports student progress with designated advisors. All new students are to contact an Admissions Advisor to begin the advising process, either prior to or upon completing the admissions requirements. Students are encouraged to call for appointments; however, admissions advisors are available for walk-ins on a first-come first-served basis.

TSTC provides advising assistance for the following:
- enrollment and financial aid processes;
- career counseling, assessment, and goal-setting;
- course selection and scheduling;
- degree planning;
- referrals to counselors, faculty advisors, and other student and instructional services; and
- job search and placement assistance.

TSTC also offers a variety of courses and programs that provide new students with a comprehensive introduction to TSTC, college life, and available advising opportunities. Admission advisors and education and career specialists can provide information relating to these courses and programs.

**New Student Orientation**

New Student Orientation begins with an overview of TSTC Marshall’s services and policies to make the transition to college an easy one. It provides an opportunity to receive important information about the admissions process, financial aid, business office procedures, housing, library, student activities, campus safety, distance learning, the learning community and the Learning Success Center. Most importantly, New Student Orientation provides the opportunity for students to meet their Program Chair and faculty members and receive information about degree plans and career opportunities and register for classes.

New Student Orientation is mandatory for all new students enrolling at TSTC Marshall and must be completed prior to first class day. It is designed to be an important early step in the College’s retention program.

**Notes**
Degree and Program Planning

Credentials

TSTC offers programs of study leading to the Associate of Applied Science degree and the Certificate of Completion. All programs are approved by the Texas Higher Education Coordinating Board.

- **Associate degree programs** are designed to train technicians who work with professionals. Because technicians must be able to understand the profession and translate ideas into actual processes, the technical programs combine theory and laboratory classes with laboratory and shop experience. The curricula are usually based on mathematics and sciences. All graduates of associate degree programs show they are competent in oral communications and the use of computers by satisfactorily completing at least one course in which oral communication and basic computer skills are covered. Graduates of these programs receive Associate of Applied Science degrees.

- **Certificate programs** are designed to produce the skilled workers needed by modern industry. Skill programs emphasize laboratory and shop experience, rather than theory. All graduates of certificate programs show they are competent in oral communication and the use of computers by satisfactorily completing at least one course in which oral communications and basic computer skills are covered. Graduates of these programs receive Certificates of Completion.

Institutional Awards

TSTC offers technical training in defined skill sets which can be grouped in various combinations to meet specific job requirements for business or industry. These skills training pathways are designed to allow students and/or incumbent workers to enter, exit and re-enter TSTC training while they continue to work or pursue further training. Credits earned in these pathways may be applied to a college credit Certificate of Completion and/or Associate of Applied Science degree. Completers in these training pathways receive the Marketable Skills Achievement Award or a Technical Skills Mastery Certificate.

Degree and Certificate Plans

A degree or certificate plan includes a set of courses that are required to earn a specific degree or certificate. Electives are approved by the student’s faculty advisor and indicated in the plan. Course credit may be earned at TSTC, transferred from another college or university, or awarded through examination.

Courses may be substituted if they are approved by the chairperson of the student’s major field of study and the Admissions and Records Office. No condition guarantees that a course substitution will be approved. Each request is decided on its own merit.

Credits earned at other colleges and universities must be approved for transfer credit by the chairperson in the student’s major field of study. Credit for courses in related areas may also require approval from the chairperson of that program area. Before consideration of transfer credit can begin, the student must be eligible to return to the last institution in which he or she was enrolled, official transcripts from all the institutions the student attended must be in the Admissions and Records Office, and a grade of C or better must have been earned in the course(s).

A student is certified for graduation only when credit has been earned for all courses in the degree or certificate plan and any appropriate course substitution and/or transfer credit authorizations are on file.

Although advisors are available to assist them, students are responsible for keeping track of their progress toward meeting program requirements. Contact the faculty advisor for assistance.

Change of Major

Students who wish to change programs should meet with an advisor. Students must meet the entry requirements if specified. Students receiving financial aid should check with the Financial Aid Office before changing their major.

To change majors, students must follow these procedures.

1. Complete the change of major form, including obtaining all required signatures. Students may be required to meet additional admission criteria for the new major.
2. Return the completed form and all supporting documentation to the Admissions and Records Office for processing.

Additional Degrees and Certificates

Credit hours may be applied toward more than one degree and/or certificate, as long as those hours meet requirements of those credentials.
Graduation and Commencement

Graduation Requirements

Within five years of initial enrollment in credit courses at Texas State Technical College, a student may graduate with a degree or certificate according to the catalog requirements in effect at the time of first enrollment at Texas State Technical College provided the degree, certificate, the program, and requisite courses are still being offered. If a student fails to complete within five years all requirements of the catalog in effect at the time of initial enrollment, the student will be required to graduate under a catalog not older than five years. Exception to this requirement may be approved in extenuating circumstances by the Vice President of Student Learning.

To obtain a diploma, a student must apply for graduation and satisfy all financial obligations to the college. Diplomas are issued after final grades have been recorded on the student’s permanent record and the student is certified as a graduate.

Students are notified of their eligibility for graduation when they achieve the following requirements for the applicable degree or certificate.

1. All TSI-related requirements are met (Associate degrees only).
2. All required course work is satisfactorily completed.
3. At least 25% of the total required credit hours are earned at the college granting the degree or certificate.
4. The student’s cumulative grade point average is 2.00 or higher.
5. The student’s grades in all major courses are C or better.
6. All transfer credits accepted by TSTC and applied to the degree or certificate are approved by the faculty of the program.
7. The student has no pending disciplinary issues as defined in the college student handbook.

Commencement Ceremonies

Since graduation ceremonies and receptions are generally held before graduate certification occurs, students are permitted to participate in these events only upon the recommendation by faculty. Students are required to wear the regalia designated by TSTC during commencement ceremonies.

Graduation Honors

Students receiving associate degrees or certificates of completion who earn Cumulative GPAs of 4.0 receive TSTC Board of Regents’ Honors.

Students receiving associate degrees or certificates of completion who earn Cumulative GPAs of 3.50 to 3.99 receive Honors.

Graduate Guarantee

If an associate degree certificate of completion graduate or marketable skills achievement award or technical skills or technical skills mastery completer is judged by his/her employer to be lacking in technical job skills identified as exit competencies for the program under which the student graduated or completed, TSTC will provide the graduate with up to 12 tuition-free semester credit hours of additional skill training, in accordance with the following.

1. The graduate must have earned the degree certificate or award since May 1992 in a technical or occupational program or pathway published in the TSTC catalog.
2. The graduate must have earned at least 75% of the total credits of the associate degree or certificate of completion at TSTC, and must have completed the degree or certificate of completion within five years of initial enrollment.
3. The graduate must be employed full-time in an area directly related to the program concentration, as certified by the Vice President of Student Learning.
4. The employment must have commenced within twelve months of graduation or completion.
5. The Graduate Guarantee process must be initiated in writing to the TSTC Office of the President or the employer.
6. The employer must certify in writing that the employee is lacking entry-level skills identified by TSTC as program exit competencies and must specify the areas of deficiency within 90 days of the graduate’s initial employment.
7. The employer, Vice President of Student Learning, career counselor, and appropriate chairperson will develop a written educational plan for retraining.
8. Retraining will be limited to 12 semester credit hours related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan.
9. All retraining must be completed within one calendar year from the time the educational plan is agreed upon.
10. The graduate and/or employer will be responsible for the cost of books, insurance, uniforms, fees, and/or other course-related expenses.
11. The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.

A student’s sole remedy against TSTC and its employees for skill deficiencies shall be limited to 12 semester credit hours of tuition-free education, as described above.
Curriculum

Developmental Education

TSTC provides developmental education for students who need assistance with basic academic skill reviews, according to the Texas Success Initiative Plan filed with the Texas Higher Education Coordinating Board. The Developmental Education program enhances these basic skills through personalized goals and a variety of instructional methods to ensure college-level coursework success for all students. Developmental education services include preparation for collegiate-level studies and training in the basic skill reviews of reading, writing, and mathematics for each program’s entry-level standards.

Developmental education courses are not counted as credit toward graduation. However, they are used along with the credit courses for determining course load, scholastic standing, term honors, and satisfactory academic progress for financial aid.

Withdrawal from any developmental course may require the approval of the Program Chair of Developmental Education. Students who are taking developmental education courses required on their TSI Plan may not drop their only developmental course without withdrawing from all courses.

The following developmental education courses are offered at TSTC.

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMTH 0050</td>
<td>Basic Mathematics</td>
<td>DMTH 0050 or Required Placement Scores</td>
</tr>
<tr>
<td>DMTH 0100</td>
<td>Introductory Algebra</td>
<td>DMTH 0100 or Required Placement Scores</td>
</tr>
<tr>
<td>DMTH 080x</td>
<td>Intermediate Algebra</td>
<td>Instructor approval</td>
</tr>
<tr>
<td>DMTH 080x</td>
<td>Mathematics Lab</td>
<td>Instructor approval</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>READ 050</td>
<td>Basic Reading Skills</td>
<td>READ 050 or Required Placement Scores</td>
</tr>
<tr>
<td>READ 0100</td>
<td>Reading Skills I</td>
<td>READ 0100 or Required Placement Scores</td>
</tr>
<tr>
<td>READ 0200</td>
<td>Reading Skills II</td>
<td>READ 0200 or Required Placement Scores</td>
</tr>
<tr>
<td>READ 080x</td>
<td>Reading Lab</td>
<td>Instructor approval</td>
</tr>
<tr>
<td>Writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WRIT 050</td>
<td>Basic Writing Skills</td>
<td>WRIT 050 or Required Placement Scores</td>
</tr>
<tr>
<td>WRIT 0100</td>
<td>Writing Skills I</td>
<td>WRIT 0100 or Required Placement Scores</td>
</tr>
<tr>
<td>WRIT 0200</td>
<td>Writing Skills II</td>
<td>WRIT 0200 or Required Placement Scores</td>
</tr>
<tr>
<td>Study Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DORI 0100</td>
<td>College Success Skills</td>
<td></td>
</tr>
</tbody>
</table>

General Education Courses

TSTC has been accredited since 1971 by the Commission on Colleges of the Southern Association of Colleges and Schools. Under this accreditation, associate degree programs must contain a basic core of general education courses. This basic core must contain a minimum of 15 semester credit hours and include at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Specific core course requirements are included within each associate degree plan.

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities/Fine Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>WRIT 0200*</td>
</tr>
<tr>
<td>ENGL 1302</td>
<td>Composition II</td>
<td>ENGL 1301</td>
</tr>
<tr>
<td>ENGL 1311</td>
<td>Business English</td>
<td>WRIT 0200*</td>
</tr>
<tr>
<td>ENGL 2311</td>
<td>Technical &amp; Business Writing</td>
<td>ENGL 1301</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to Humanities</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Intro to Speech Communication</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>SPCH 1315</td>
<td>Public Speaking</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>SPCH 1321</td>
<td>Business &amp; Professional Speaking</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>Social/Behavioral Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>PSYC 2303</td>
<td>Business Psychology</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>Government/History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOVT 2305</td>
<td>Federal Government</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>GOVT 2306</td>
<td>Texas Government</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>HIST 1301</td>
<td>United States History</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>Natural Sciences/Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 2301</td>
<td>Principles of Accounting</td>
<td>DMTH 0200*</td>
</tr>
<tr>
<td>BIOL 2406</td>
<td>Environmental Biology</td>
<td>READ 0200*</td>
</tr>
<tr>
<td>CHEM 1305</td>
<td>Introductory Chemistry</td>
<td>DMTH 0200*</td>
</tr>
<tr>
<td>CHEM 1411</td>
<td>General Chemistry I</td>
<td>DMTH 0200*</td>
</tr>
<tr>
<td>PHYS 1310</td>
<td>Elementary Physics</td>
<td>DMTH 0200*</td>
</tr>
<tr>
<td>PHYS 1410</td>
<td>College Physics</td>
<td>MATH 1316</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
<td>DMTH 0200*</td>
</tr>
<tr>
<td>MATH 1316</td>
<td>Plane Trigonometry</td>
<td>MATH 1314</td>
</tr>
<tr>
<td>MATH 1324</td>
<td>Finite Math for Business</td>
<td>MATH 1314</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>College Mathematics</td>
<td>DMTH 0200*</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods</td>
<td>DMTH 0200*</td>
</tr>
<tr>
<td>MATH 2313</td>
<td>Calculus I</td>
<td>MATH 1316</td>
</tr>
</tbody>
</table>

Prerequisites and Co-requisites

Students must complete designated prerequisite courses before registering for certain courses and must take co-requisite courses during the same term. Such requirements are indicated as part of the course descriptions. Students are responsible for taking courses in sequence and at the proper level. Failure to adhere to prerequisite and co-requisite requirements may result in the students being withdrawn from the courses.

Credit Award for Assessments and Training

Credit awards for Texas State Technical College (TSTC) courses based on credit by examination or non-traditional training and experiences are available to students who plan to enroll at TSTC and to currently enrolled students. TSTC awards credit for various examinations published by the College Board, including the College Board Advanced Placement Program (AP) and the College Level Examination Program Subject Exams (CLEP-S). TSTC also awards credit for training received while in the United States Armed Services, for credit earned.
through the International Baccalaureate Diploma Program and, for credit earned in high school dual credit courses. Students may also be eligible to receive credit awards for other types of training and experience subject to review and approval by the appropriate college official.

**General Rules and Regulations**

The total number of semester credit hours awarded for Credit Awards may vary depending upon the student’s program of study; however, the total credit awarded (including transfer credits) cannot exceed 75% of the total credits required for the student’s declared program of study. At least 25% of the total credits in a TSTC student’s certificate or AAS degree plan must be earned through regular SCH instruction at a TSTC college or at another institution of higher education in partnership with TSTC.

To receive Credit Awards, students must be enrolled at TSTC and have completed a minimum of six semester credit hours of non-developmental coursework at TSTC. New students who request and meet the standards for Credit Awards will be granted credit pending completion of six non-developmental semester credit hours at TSTC.

While credit may be awarded by TSTC for external exams and training, this credit may not satisfy requirements for a specific program of study. Students should check with program advisors to determine if accepted Credit Awards will meet program requirements.

A grade of CR (credit) will be assigned for any course in which Credit Awards are received. This grade is not computed in the grade point average, and the credit does not count toward calculation of student load for a term.

The student is responsible for obtaining documentation of external exam scores and/or other training and submitting it to the Registrar’s Office at a TSTC College. Scores for the College Examination Program (CLEP) and Advanced Placement (AP) examinations, as well as other Credit Award documentation, should be received prior to enrollment for use in course advisement and placement.

Students must complete the appropriate Credit Award Request form with appropriate documentation to initiate the Credit Award process.

Payment of any fees associated with Credit Award program must be received before credit can be posted to the student’s transcript.

---

**CLEP Subject Area Exams**

**CLEP Subject Area Exams**

The College Level Examination Program (or CLEP) is a series of tests offered by HREF="http://en.wikipedia.org/wiki/College.Board" MACROBUTTON HtmlResAnchor College Board. The tests cover a variety of subject areas including business, science and mathematics, history and social sciences, foreign languages, and composition and literature. CLEP exams are offered on most college and university campuses.

TSTC awards course credit for the following CLEP Subject Exams providing the minimum score has been obtained on the specific test. TSTC does not award credit for the CLEP General Exams. CLEP Scores are valid for ten (10) years from the test date.

<table>
<thead>
<tr>
<th>CLEP Subject Test Name</th>
<th>Score</th>
<th>Minimum</th>
<th>TSTC Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>6</td>
<td>ACCT 2301, 2302,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2401, 2402</td>
</tr>
<tr>
<td>General Biology</td>
<td>50</td>
<td>8</td>
<td>BIOL 1406, 1407</td>
</tr>
<tr>
<td>Introductory Business Law General Chemistry</td>
<td>50</td>
<td>3</td>
<td>BUSI 2301</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>3</td>
<td>ECON 2301</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>3</td>
<td>ECON 2302</td>
</tr>
<tr>
<td>English Composition with Essay</td>
<td>50</td>
<td>6</td>
<td>ENGL 1301, 1302</td>
</tr>
<tr>
<td>English Literature</td>
<td>50</td>
<td>6</td>
<td>ENGL 2222, 2223</td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>6</td>
<td>ENGL 2227, 2228</td>
</tr>
<tr>
<td>American Government</td>
<td>50</td>
<td>3</td>
<td>GOVT 2301</td>
</tr>
<tr>
<td>History of U.S. I</td>
<td>50</td>
<td>3</td>
<td>HIST 1301</td>
</tr>
<tr>
<td>History of U.S. II</td>
<td>50</td>
<td>3</td>
<td>HIST 1302</td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>6</td>
<td>HUMA 1301, 1302</td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>3</td>
<td>MATH 1314</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>3</td>
<td>MATH 2413</td>
</tr>
<tr>
<td>Calculus with/Elementary Functions</td>
<td>50</td>
<td>4</td>
<td>MATH 2312</td>
</tr>
<tr>
<td>Pre Calculus</td>
<td>50</td>
<td>3</td>
<td>MATH 2312</td>
</tr>
<tr>
<td>Introductory Psychology</td>
<td>50</td>
<td>3</td>
<td>PSYC 2301</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>50</td>
<td>3</td>
<td>PSYC 2314</td>
</tr>
<tr>
<td>Introductory Sociology</td>
<td>50</td>
<td>3</td>
<td>SOCI 1301</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>50</td>
<td>6</td>
<td>SPAN 1311, 1312</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>55</td>
<td>12</td>
<td>SPAN 1311, 1312</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2311, 2312</td>
</tr>
</tbody>
</table>

**Advanced Placement**

Advanced Placement (AP) exams are offered by the College Board to students who complete AP courses while enrolled in high school. The exams cover a variety of subject areas including business, science and mathematics, history and social sciences, foreign languages, and composition and literature.

TSTC awards course credit for the following AP Exams providing the minimum score has been obtained on the specific test. AP scores are valid ten (10) years from the test date.

<table>
<thead>
<tr>
<th>AP Test Name</th>
<th>Score</th>
<th>Credits</th>
<th>TSTC Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art, History of</td>
<td>3</td>
<td>3</td>
<td>ARTS 1303</td>
</tr>
<tr>
<td>Art, History of</td>
<td>4</td>
<td>6</td>
<td>ARTS 1303, 1304</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>4</td>
<td>BIOL 1406</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>8</td>
<td>BIOL 1406, 1407</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3</td>
<td>4</td>
<td>CHEM 1411</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
<td>8</td>
<td>CHEM 1411, 1412</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>3</td>
<td>3</td>
<td>COSC 1301, 1302, ITSC 1302, 1307</td>
</tr>
</tbody>
</table>
Credit for Military Training

Students who received training while in the United States Armed Services may receive credit for that training, provided appropriate documentation is provided and the training is equivalent to a course or courses offered by TSTC. Credit awarded for military training is based on the recommendations from the American Council on Education (ACE) in its Guide to the Evaluation of Educational Experiences in the Armed Services and must be approved by the appropriate TSTC department chair for the specific subject area.

“The Military Registries provide quality assurance and policy guidance to the U.S. Army, Navy, and Marine Corps in support of the Army/ACE Registry Transcript Service (AARTS) and the Sailor/Marine/ACE Registry Transcript (SMART). More than 2,300 colleges and universities recognize these ACE-endorsed transcripts as official documentation of military experiences and accurate records of applicable ACE credit recommendations.”

Students who wish to receive credit for military training should obtain a transcript from the Defense Activity for Non-Traditional Education Support (DANTES). This agency maintains the educational records of the service members who have completed DANTES Subject Standardized Tests (DSSTs), CLEP examinations, USAFI (United States Armed Forces Institute), and GED tests.

Before July 1, 1974, the results of courses and tests taken under the auspices of USAFI (United States Armed Forces Institute, disestablished 1974) are also available from the DANTES Program:

DANTES Program
The Chauncey Group International
P. O. Box 6605
Princeton, NJ 08541-6605

There is a $10.00 fee charged for each transcript from DANTES.

International Baccalaureate Diploma Program (IBD)

Students who have received an International Baccalaureate Diploma (IB) may receive TSTC course credit for the following exams with scores of four (4) or higher on either standard level (SL) or higher level (HL) examinations. Students who have taken IB exams but do not have an IB diploma may receive credit for scores of five (5) or higher on higher level (HL) examinations only.

<table>
<thead>
<tr>
<th>IBD Exam Name</th>
<th>Minimum Score with IB Diploma</th>
<th>Minimum Score without IB Diploma</th>
<th>Credits</th>
<th>TSTC Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (HL)</td>
<td>4</td>
<td>n/a</td>
<td>8</td>
<td>BIOL 1406, 1407</td>
</tr>
<tr>
<td>Biology (SL)</td>
<td>4</td>
<td>n/a</td>
<td>8</td>
<td>BIOL 1406, 1407</td>
</tr>
<tr>
<td>Chemistry (HL)</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>CHEM 1411, 1412</td>
</tr>
<tr>
<td>Chemistry (SL)</td>
<td>4</td>
<td>n/a</td>
<td>8</td>
<td>CHEM 1411, 1412</td>
</tr>
<tr>
<td>Economics (HL)</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>ECON 2301, 2302</td>
</tr>
<tr>
<td>Economics (SL)</td>
<td>4</td>
<td>n/a</td>
<td>6</td>
<td>ECON 2301, 2302</td>
</tr>
<tr>
<td>English Language A1 (HL)</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>ENGL 2322, 2323</td>
</tr>
<tr>
<td>English Language A1 (SL)</td>
<td>4</td>
<td>n/a</td>
<td>6</td>
<td>ENGL 2322, 2323</td>
</tr>
<tr>
<td>Mathematics (HL)</td>
<td>4</td>
<td>n/a</td>
<td>6</td>
<td>MATH 1314, 1316</td>
</tr>
<tr>
<td>Math Methods (SL)</td>
<td>4</td>
<td>n/a</td>
<td>3</td>
<td>MATH 1314</td>
</tr>
<tr>
<td>Math Studies (SL)</td>
<td>4</td>
<td>n/a</td>
<td>3</td>
<td>MATH 1324 or 1325</td>
</tr>
<tr>
<td>Philosophy (HL)</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>PHIL 1301</td>
</tr>
<tr>
<td>Philosophy (SL)</td>
<td>4</td>
<td>n/a</td>
<td>3</td>
<td>PHIL 1301</td>
</tr>
<tr>
<td>Physics (HL)</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>PHYS 1401</td>
</tr>
<tr>
<td>Physics (SL)</td>
<td>4</td>
<td>n/a</td>
<td>4</td>
<td>PHYS 1401</td>
</tr>
<tr>
<td>Psychology (HL)</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>PSYC 2301</td>
</tr>
<tr>
<td>Psychology (SL)</td>
<td>4</td>
<td>n/a</td>
<td>3</td>
<td>PSYC 2301</td>
</tr>
</tbody>
</table>

Credit Award for Continuing Education Units and Experiential Learning

Students who have successfully completed continuing education (CEU) courses offered by a TSTC college are eligible to apply for semester credit hour technical course credit. CEU coursework must be demonstrated to be substantially the same as the equivalent semester credit coursework. Students must sign and submit a Continuing Education Hours (CEU) Course Equivalency Evaluation form to the instructional administrator of the appropriate technical program in which the course(s) are managed.

Experiential learning allows students to receive college credit for equivalent educational experiences acquired through earlier schooling situations, work/on-the-job training or life experiences. Upon approval of the appropriate department chair and/or dean, a student may develop a petition for a course or courses offered by TSTC to gain college-level credit. Petitions are reviewed by the appropriate department chair and/or dean and submitted to the Vice President for Student Learning for approval.

Students with applicable skills and knowledge may also receive credit for technical courses in which proficiency is determined by examination. These challenge exams are designed and written by qualified faculty and may be administered in the
technical department or testing center.

More specific information on credit award for continuing education units and experiential learning may be obtained from Workforce Development Office or the Testing center and/or Evaluation fees may apply.

**Audited Courses**

Students may audit courses with permission from the course instructors and the Admissions and Records Office. Students auditing courses must adhere to the same class requirements as those students taking the courses for credit. Audited courses are not considered when determining a credit hour load, and a grade of "AUD" is shown on the students' grade reports. Students may take courses for credit after auditing them but may not receive credit by examination or use audited courses as course substitutions in degree or certificate plans. Students who audit courses will be charged state and designated tuition as specified in the Tuition and Fees section of this catalog. Contact the Business Office for more information.

**Cooperative Education**

Most certificate and degree programs offer students opportunities to participate in cooperative training with industry for at least one semester. Students in cooperative experiences earn up to 12 credit hours working off-campus at jobs related to their fields of study. This phase of training is a cooperative effort between the student, industry, and TSTC to provide valuable work experience. Cooperative education is competitive, enabling some qualified students to earn income to help support their education. Students who are interested in participating in cooperative experiences should discuss the opportunities with their department chairpersons.

**Individualized Instruction**

Some programs of study offer individualized instruction. In these programs, students may complete course requirements without attending regularly-scheduled lecture or laboratory sessions. Students enroll in an agreed-upon number of contact hours and are awarded credit when course objectives are met. This allows students to advance through program requirements at a comfortable speed, which may be slower or faster than the more traditional approach. Students should talk with their department chairpersons about the availability of individual instruction in their programs of study.

**Dual Credit Courses**

High school students who have completed their sophomore year may enroll for dual credit academic and technical courses at TSTC while still in high school through the exceptional admission program. Students receive either transcripted credit for regular college credit courses or articulated credit that is based upon agreements with school districts. Contact the Admissions and Records Office for more information.

**Early College High School**

Early college high schools (ECHS) are small high schools designed to allow students to earn both a high school diploma and an associate’s degree or up to two years of credit toward a bachelor’s degree. Early college high schools may be located on or associated with the TSTC colleges. Students attending ECHS enroll in TSTC courses as part of their high school curriculum. While similar to dual credit programs, students in ECHS are subject to additional requirements for admission and participation in classes. Contact an admissions advisor or education and career specialist at a TSTC college for more information.

**Day/Evening/Weekend Courses**

The majority of college credit courses are taught on weekdays during the day, with selected courses offered during the evenings and/or on Saturdays. Continuing education and workforce training courses are scheduled throughout these time periods; contact Workforce Development Office for details.

**Distance Learning**

TSTC offers instruction through a variety of electronic media, including videoconferencing and the Internet. Through videoconferencing labs, TSTC sends and receives classes to and from various colleges and schools. Internet classes offer students the opportunity to complete college courses using personal computers and Internet connections. Each TSTC program that offers distance learning courses has requirements specific to that department.

Distance learning courses are not self-paced. However, depending on the nature of the instructional method, students may complete course requirements as their schedules permit. Students enrolled in distance learning courses must meet deadlines, take scheduled tests, etc., but typically they do not have to be in classrooms at specific times, except when required by the instructors. Those students who take courses via the Internet complete assignments using computers and communicate with instructors through e-mail, fax, and by telephone. Some distance learning courses require proctored testing.

Admission requirements are the same as those for on-campus students. Students planning to take only distance learning courses should notify the Admissions and Records Office so that appropriate information and advising can be arranged. Advising is accomplished by e-mail and telephone.
In most cases, tuition for distance learning courses is the same as on-campus courses. The Tuition and Fees section of this catalog provides more details. The cost of proctored exams, if any, is paid by the students. Students may order books and materials from the TSTC Bookstore or purchase them locally.

**Enrollment**

**Registration**

Registration dates are published in the college calendar. Returning students and new students who have completed admission procedures should contact their local TSTC campus for specific registration information.

**Schedule Changes**

Currently enrolled students may add courses, drop courses, or change sections before classes begin by contacting their program advisors. After classes begin, all students may change their schedules by obtaining course schedule change forms available from the Admissions and Records Office, instructors and/or department chairs. The completed forms must be submitted to the Admissions and Records Office, by the deadline published in the TSTC college calendar. Changes are effective only when this process has been completed.

**Drops and Withdrawals**

Students may drop courses or withdraw from the College by completing a course schedule change form, obtaining the appropriate approval signatures, and submitting the form to the Admissions and Records Office. The effective date is the date the course schedule change form is received in the Admissions and Records Office. Deadlines for course drops and withdrawals from the college are published in the TSTC college calendar.

Students who are taking developmental education courses required by their TSI plan or pre-requisite issues may drop their developmental course only after proper advisement and approval by the Program Chair of Developmental Education.

Students who concurrently drop and add the same number of credit hours in a simultaneous transaction do not incur additional charges or receive refunds. See “Refunds for Changes in Enrollment” in the Refunds section for more information.

Courses that are dropped prior to the official census dates do not appear on the student’s transcript. After the official census dates, students who drop courses or withdraw from the institution receive marks of “W” (Withdrawal), provided the forms are received on or before the published deadline.

Students who have completed at least 75% of the term and who are called to active military service may request an excused absence rather than withdrawal from their courses. Students who request leave based on military service will be given grades of “IM” in all courses and will have two years from the end of the term to complete course work. Grades of “IM” awarded to students called to military service will be changed to “W” grades if the required course work is not completed by the end of the two-year period.

Students who withdraw from the College must ensure that all library books and laboratory equipment are returned and all financial obligations are settled before they leave.

**Student Participation**

Students are responsible for their own class attendance and participation. Faculty members may establish requirements for student participation in specific learning activities both in and out of the classroom and may consider these requirements when determining final grades.

**Student Absence on Religious Holy Days**

Under Texas Education Code 51.911, a student who is absent from class for the observance of a religious Holy Day is allowed to take an examination or complete an assignment scheduled for that day within a reasonable time period, as established by the faculty member. The student must give written notice by submitting a completed absence request form to the Associate Dean of the Learning Community within the first 10 days of the term.

**Articulation Agreements**

**Tech Prep**

Tech Prep is part of a national education initiative to transform technical education. A Tech-Prep program, as defined in the Technical Education Program Guidelines of the Texas Higher Education Coordinating Board, is a cooperatively developed six-year program of study that begins in the ninth grade and leads to an associate of applied science degree from a public community or technical college. This cooperative arrangement involves business, industry, labor, and secondary and higher education. A Tech Prep Bridge is available for students who do not take the Tech-Prep program in high school. For more information, contact a high school counselor, TSTC department chair, or TSTC Tech Prep representative.

**High School Articulation Agreements**

TSTC has established articulation agreements with various high schools throughout the state. These agreements allow entering students to use their work in pre-determined high
school courses for credit in TSTC programs. To determine if a particular high school is participating in this program, contact the high school counselor and appropriate TSTC department chairperson.

Transfer of Credit

The transfer of course credit from TSTC to other Texas colleges and universities is facilitated by the Texas Higher Education Coordinating Board (THECB) Academic Course Guide Manual and Workforce Education Course Manual. In general, students may submit an official TSTC transcript to another college or university for consideration of transfer credits. Acceptance of credits is at the discretion of the receiving institution. Contact the appropriate department chair for more information.

Resolution of Transfer Disputes for Lower Division Courses

The following procedures specified in Texas Higher Education Coordinating Board Rules (Chapter 4, Subchapter B, Section 4.27) shall be followed by institutions of higher education in the resolution of credit transfer disputes involving lower-division courses:

1. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied, and shall include in that notice the reasons for denying the credit. Attached to the written notice shall be the procedures for resolution of transfer disputes for lower-division courses as outlined in this section, accompanied by clear instructions outlining the procedure for appealing the decision to the Commissioner.

2. A student who receives notice as specified in paragraph (1) of this subsection may dispute the denial of credit by contacting a designated official at either the sending or the receiving institution.

3. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and guidelines.

4. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the sending institution may notify the Commissioner in writing of the request for transfer dispute resolution, and the institution that denies the course credit for transfer shall notify the Commissioner in writing of its denial and the reasons for the denial.

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

Each institution of higher education shall publish in its course catalogs the procedures specified in all subsections of Section 4.27 in the Texas Higher Education Coordinating Board rules.

The Board shall collect data on the types of transfer disputes that are reported and the disposition of each case that is considered by the Commissioner or the Commissioner's designee.

If a receiving institution has cause to believe that a course being presented by a student for transfer from another school is not of an acceptable level of quality, it should first contact the sending institution and attempt to resolve the problem. In the event that the two institutions are unable to come to a satisfactory resolution, the receiving institution may notify the Commissioner, who may investigate the course. If its quality is found to be unacceptable, the Board may discontinue funding for the course.

Scholastic Integrity

TSTC expects all students to engage in scholastic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity. Any student found guilty of scholastic dishonesty is subject to disciplinary action. Scholastic dishonesty includes, but is not limited to, cheating on academic work, plagiarism, and collusion.

• Cheating on academic work includes, but is not limited to:
  • copying from another student's test paper or other academic work;
  • using materials during a test that have not been authorized by the individual giving the test;
  • collaborating with another student, without authorization, during an examination or in preparing academic work;
  • bribing another person to obtain an unadministered test;
  • knowingly using, buying, selling, stealing, transporting, or soliciting, in whole or in part, the contents of an unadministered test; and
  • substituting for another student, or permitting another student to substitute for oneself, to take a test or prepare other academic work.

• Plagiarism means claiming another's work as one's own without acknowledging its origin and doing so for credit.

• Collusion means unauthorized collaboration with another person in preparing a written work offered for credit.

Discipline for scholastic dishonesty follows the same course as other disciplinary actions, except the appropriate faculty member considers and reviews the case first. The student may
appeal the faculty member’s decision to the program chairman or department head and then to the Associate Dean of the Learning Community. If the student is not satisfied with the Associate Dean of the Learning Community’s decision, he/she may follow the normal disciplinary appeal procedures. Students are not suspended from class or from the College until they have received due process.

Continuing Education and Corporate Workforce Training

TSTC offers a range of continuing education and workforce training courses and programs. Credit in these courses and programs is awarded as “Continuing Education Units” (CEUs) upon successful completion of course and program objectives. Courses may be offered to the general public or in a customized format for businesses and industries to meet specific workplace needs. Typical curriculum offerings include:

- Training and retraining programs that respond to requests or needs of business or other institutions and agencies
- Specialized customized training courses, workshops, seminars, and clinics
- Training for industrial start-up or expansion programs
- Continuing education to train for new careers and to provide skill updates, professional development, personal improvement and recreation.

Admission and Registration

The majority of CEU courses and programs have no admission requirements, however all participants are required to complete a registration form with basic demographic information. Some specialized programs may require demonstrated skills or competencies prior to enrollment.

Tuition and Fees

CEU courses vary in price depending on the length of the course, special equipment or labs used in training and other factors. Customized CEU training courses may be billed directly to the sponsoring business or industry or employers may reimburse students for approved CEU training courses.

Unless the course or student is sponsored by a business or agency, payment of all tuition and fees is required prior to the first class meeting.

Class Records and Certificates

Students completing CEU courses receive one (1) CEU for every 10 hours of participation in a continuing education course or program. Grades of Satisfactory “S” or Unsatisfactory “U” are typically awarded in CEU classes. Other types of grades may be awarded depending on the requirements of the course sponsor. Students who successfully complete CEU courses receive a certificate certifying the number of CEUs awarded.

CEUs earned in classes taught by TSTC may be converted to semester hour (college) credit that is applicable to a certificate of completion or associate degree. Refer to the Credit Award for Assessments and Training section of this catalog for more information.

Customized Training for Business and Industry

TSTC’s Workforce Development Office has a corporate college representative to respond to requests from businesses and other institutions or agencies to develop and offer specialized training for employees. Training may be provided at the college or at the sponsor’s site of choice. For more information on specialized business and industry training contact Workforce Development Office.

Student Services

Student Housing

Most college students say they learn and grow as much by living on campus as they do by attending classes. The living environment at TSTC gives students opportunities for social interaction, interpersonal relationships and cultural activities. Residential living is an important component of the student’s total development as a student. The students are encouraged to join in residential living and expand their experience through human relationships, new ideas and cultural diversity. TSTC offers on-campus housing available to the single student and accommodations are available for students with disabilities.

New campus residents must participate in a housing orientation session specifically designed for those who live in one of TSTC’s apartments. This initial orientation introduces students to key personnel and resources needed to make a good adjustment to apartment living.

![Image of a residential area with a sign for TSTC Technical College.](image-url)
Student Housing Requirement

Effective for students entering Fall 2006, all students under the age of 21 with fewer than two completed semesters the first day of the class term are required to live in campus housing.

Exemptions to this practice may be obtained if the student lives with parents or legal guardians; is married or has dependent children; has a special medical need as verified by a physician that cannot be provided by the college; is enrolled in only distance learning courses; or lives within a 50 mile radius of TSTC Marshall. Special circumstances justifying an exemption may be authorized upon the approval of the Associate Dean of the Learning Community.

Housing Reservations

Submit an application for enrollment to TSTC Marshall before applying for housing. The housing application and deposit of $150.00 should be paid well in advance of enrollment if possible. The deposit can be made by check or money order payable to Texas State Technical College. If the student decides not to enroll or live in campus housing, the individual must request in writing a full refund of the deposit at least 30 days prior to the first class day of the semester. Security deposits for campus residents will be retained until they properly clear/vacate housing and request a refund. See the section labeled “Housing Deposit” for a full description of the refund process.

Housing Assignments

Returning students have priority in housing assignments however, they must reserve their own rooms for future occupancy before the end of the current semester. Room assignments for new students are made based upon the date the deposit was paid and the application received by the Housing Office. All possible consideration will be given to requests for specific apartments or roommates; however, the college reserves the right to assign students to different apartments or roommates either before or during an academic period when it is in the best interest of the college to do so. The college also reserves the right to require students to move to another building or apartment to conserve energy, for safety reasons, to conduct repairs or remodel and for other reasons that are in the best interest of the college.

Housing Regulations

Housing regulations are available online and in the Housing office. Residents may move into their assigned apartments on the Friday before classes begin if advance rent and room deposits have been paid or satisfactory arrangements for rent payments have been made with the Coordinator of Residence Life. A lease agreement must also be signed at this time. All apartment residents must carry school identification while in the area of the apartments so that campus residency can be confirmed by college officials, if requested. Residents who cease to be TSTC Marshall students effectively terminate their lease and must vacate their apartment immediately. In this circumstance, the student is still obligated for the entire semester’s rent. The security deposit may also be forfeited.

Housing Deposit

The College may retain the deposit or some portion of the deposit for property loss or damage, excessive cleaning, and repairs. Residents who live in campus housing are expected to pay for disciplinary fines, loss, damage, repair or cleaning costs assigned to them during a semester in a timely manner. In situations where charges have been deducted from a resident’s housing deposit at the end of a semester, the deposit must be restored to the full amount by the beginning of the next semester if that student wants to continue living on campus. If the resident withdraws from the College but owes money for any reason, the College will apply the deposit to the resident’s bill and refund the balance, if any. To qualify for up to a $100.00 refund of the security deposit, the resident must pay for the entire semester’s rent, present a clean and undamaged room and apartment at the housing check-out inspection, return all keys and keycard, and present a written request for a refund of his/her security deposit. Students should allow up to 30 days for refunds.

Testing Services

Testing services assist students in obtaining maximum results from their educational opportunities. Students are encouraged to make appointments; however, walk-ins are welcomed and accommodated, based on testing availability.

The Testing Office is responsible for offering testing services that include the required placement testing in accordance with the Texas Success Initiative (TSI), certification exams and exams for students who are enrolled in Virtual College of Texas (VCT) courses. The Testing Office also works with the Developmental Education department to create the TSI plans that are used for advisement and placement purposes at the College.

Student Activities

Social Activities

Campus life at TSTC includes a variety of social activities, such as movies, dances, parties, and other special events.

Intramural and Recreational Sports

TSTC sponsors a variety of team and individual sports.
throughout the year. These programs contribute to students’ general education by providing experiences that are available only through sports, athletic competition, and recreation. Intramural and recreational sports help create well-balanced and happy individuals by developing physical skills, good health, mental alertness, and social well being. These programs strive to reach as many students as possible and develop permanent interests in sports and lifetime fitness. These programs include team sports, such as flag football, basketball, softball, and volleyball, as well as other activities, such as tennis, racquetball, and aerobics.

The TSTC Games include participants from TSTC Harlingen, TSTC Marshall, TSTC Waco, and TSTC West Texas. These competitions are held every year, with the Colleges serving as hosts on a rotating basis.

Student Government

The Student Government Association (SGA) is the governing body that represents students and advises the college administration on issues of student interest and concern. In October, each instructional program elects one representative to serve on the SGA. Contact the Student Activities Office or the Associate Dean of the Learning Community for more information.

Student Clubs and Organizations

Student clubs and organizations provide many opportunities for students to get involved in campus activities. Some clubs and organizations focus on particular professional fields, while others relate to more general interests, hobbies, and support services. Each club or organization must have a faculty/staff advisor and must be approved annually by the Associate Dean of the Learning Community. Students are encouraged to visit the Student Activities Office to learn more about student clubs and organizations.

Student Publications

Students who are interested in writing, photography, or journalistic projects are encouraged to become involved with the various college publications. Contact the Student Activities Office for more information.

Student Identification Cards

All new college credit students are required to obtain TSTC identification (ID) cards when they register; ID cards are optional for students in continuing education and workforce training programs. Students should carry these cards at all times because they must be presented for various purposes, such as cashing checks, paying fees, and checking out library books. Misuse of ID cards may result in disciplinary action.

Library Resource Center

The Library Resource Center (LRC) provides print and non-print resources and services for students and faculty, including access to the Internet. Materials are selected to serve the curricular, vocational, and recreational needs of the college community. A trained staff of professional librarians is available to aid students in locating and using these materials.

The Texas State Technical College Library at Marshall shares the TSTC System Vision of “strengthening the competitiveness of Texas business and industry by building the state’s capacity to develop the highest quality workforce.” The Library also supports the vision by connecting people with ideas, in support of technical teaching and learning and workforce and economic development. The library is furnished with the state-of-the-art technology and is the host for print and electronic databases that support the college curriculum.

Students must clear their LRC records before the end of each semester. Official transcripts are not released and registration for subsequent semesters may not be allowed until all obligations are met.

College Bookstore

The TSTC Bookstore maintains a wide selection of books and supplies required for classes and labs. The bookstore also offers an assortment of educational materials, health care products, stamps, cards, envelopes, and snacks, as well as an array of college sportswear, hats, and novelties.
Student Health

Health Services

TSTC Marshall offers limited health services to its students. For more information on student health services contact the Associate Dean of the Learning Community. The college schedules occasional education programs for students on a variety of health related topics. Students who do not have access to health and accident insurance are strongly encouraged to purchase the optional student insurance offered through the College.

HIV Policy and Procedures

TSTC does not discriminate against students who are HIV-positive. The College works to increase awareness and educate its students and employees about HIV infection and the AIDS virus with the express purpose of preventing infection and limiting the consequences of infection. Copies of TSTC’s policy and procedures relating to HIV infection are available in Associate Dean of the Learning Community. Additional information and referral services for testing are available in the Learner Support Services Office.

Bacterial Meningitis Notification

State law requires that information regarding bacterial meningitis be provided to new college students. Bacterial meningitis is a serious, potentially deadly disease that can progress extremely fast. It is an inflammation of the membranes that surround the brain and spinal cord and can infect the blood. The disease can be treated, but those who survive may develop severe health problems and severe disabilities. Vaccinations that are effective against 70% of the most common types of bacterial meningitis are available and should be considered by those living in close quarters and by college students aged 25 or younger. For more information, contact your health care provider, the local or regional Texas Department of Health Office, or www.cdx.gov/ncidod/dmbsdiseaseinfo.

Student Health Insurance

Students are required to adhere to stringent safety precautions and to make provisions for the cost of medical treatment in the event of an accident or emergency illness. Students in allied health programs are required to show proof of health insurance. Other students are required to:

1. show proof of having health insurance coverage; or
2. enroll in the TSTC student health insurance plan; or
3. be personally responsible for expenses incurred in receiving medical treatment.

The student health insurance offered for a fee at TSTC is a low-cost group plan that provides financial protection in the event of an accident or illness requiring emergency medical treatment and/or hospitalization. Students are responsible for expenses not covered by insurance. Contact the Business Office for more information.

Some TSTC programs require student medical health and accident insurance. Contact the program advisor for more information.

Campus Security

The Student Right-to-Know and Campus Security Act (Public Law 101-542), the Crime Awareness and Campus Security Act (Public Law 102-26), the Higher Education Technical Amendments of 1991, and the Higher Education Technical Amendments of 1992 require institutions of higher education to prepare, publish, and distribute to all employees, prospective students, and students an Annual Security Report by September 1 of each year. This report contains data about specific criminal offenses that occurred on campus during the most recent calendar year and the two preceding calendar years, as well as the number of arrests for crimes occurring on campus. TSTC’s Annual Security Report is available in the TSTC Marshall Police Department Office.

Information provided by the State of Texas concerning registered sex offenders may be obtained through the Web site that is maintained by the TSTC Marshall Police Department Office. Additional information relating to state- or federally-mandated public information requirements is also available on that Web site.

Student Success

The Department of Learning Success seeks to improve student success and retention through identification of at-risk students and implementation of constructive intervention that promotes positive student success patterns. The department provides the following support for students:

- Developmental Education classes for students desiring access to higher education, yet classified as academically under-prepared by the Texas Success Initiative (TSI) standards in areas of reading, writing, or math
- The Learning Success Center, a free, walk-in tutoring service for students desiring individualized or group supplemental instruction, and/or computer lab and printing access
- Comprehensive orientation services and orientation classes to acquaint students with the college environment and to equip students with the academic skills necessary for college success
- Learner Support Services for special populations students who demonstrate a need for academic support
• Placement Services for students embarking in a job search, needing aid with a personalized resume, E-Portfolio, or job-search skills
• Internet Café for students needing a place to socialize, watch TV, gather campus news, use computers, have a snack, or study for classes

The Department of Learning Success enhances all students’ chances of college and career success. The program’s components are designed to promote solid academic foundations, provide student support, and foster success among the student body.

**Learner Support Services Office**

The Learner Support Services Office provides various types of assistance designed to aid special population students in reaching their true potential at Texas State Technical College Marshall. The 1998 Carl Perkins Act defines Special Population as:

• Individuals with disabilities
• Individuals from economically disadvantaged families, including foster children
• Individuals preparing for non-traditional training/employment
• Single parents, including single pregnant women
• Displaced homemakers
• Individuals with other barriers to educational achievement

Services Available
• Childcare Assistance*
• Textbook Assistance*
• Academic Guidance
• Personal Counseling Referral
• ADA Accommodations
• Career Planning and Placement

*These Services are funded by the Carl D. Perkins grant and are contingent upon availability of funds and adherence to program policies. Eligibility screening is required.

**ChildCare Services**

The Child Care Assistance Program is available to TSTC students who qualify. (See Learner Support Services for qualifications.) If qualifications are met, the student must maintain a 2.0 GPA each semester, have an overall GPA of 2.0 or higher, and remain a full-time student.

TSTC Marshall will not assume any responsibility for the selection of a childcare facility or responsibility for care of children enrolled in a selected facility. Although students select the childcare provider of their choice, the provider must be licensed and /or registered by the State of Texas.

**Services for Students with Disabilities**

Reasonable accommodations are provided for students with physical, learning, or psychological disabilities. Each student, after self-reporting and providing appropriate documentation, is evaluated individually to determine suitable accommodations. Students are encouraged to contact the Learner Support Services Office early to allow sufficient time for processing accommodation requests. The Student Counselor collaborates with both college personnel and disabled students to develop appropriate accommodations to assist in the student’s academic endeavors. In order to provide effective educational support to students, the Learner Support Services Office also has assistive devices and software available for students’ usage in its resource center.

**Learning Success Center**

The Learning Success Center (LSC) seeks to prepare students for satisfactory achievement in either academic or technical courses. The programs and resources of the LSC are designed to aid students in developing academic and study skills that empower students with confidence in their ability to learn successfully.

The LSC offers the following assistance:
• Free, walk-in peer tutoring
• Individualized study skills advising
• Academic skills workshops
• Student support programs
• Computer and printer access

**Counseling Services**

Counseling Services supports student success by providing a licensed professional counselor who is available to discuss personal, social, educational, and career concerns. The counselor’s purpose is to help students identify their educational goals, to facilitate their success in achieving these goals, and to provide professional assistance with obstacles encountered. Information disclosed during counseling sessions is strictly confidential, except when it involves potential danger to oneself or others, child abuse, or criminal conduct.

**Job Placement Services**

**Placement Services:** Career Placement and Placement Center is utilized by TSTC students as an OneStop shop for Career information. Usage includes exploring careers, extensive job search capabilities, education + training information, resume and interview preparation (including samples) and career counseling. Employers seeking graduates for potential employment are urged to visit the center, attend Industry Career Day offered twice per year, and /or contact the Director of the Center to have their job announcement.
posted for students and Program Directors to view. Students will find a host of resources available to them to connect with employers, research companies they wish to be employed and find out about new market trends.

**Job Search Assistance:** TSTC Career Planning and Placement Center offers CSO (Career Services On-line) and other technologies for students and employers. Students may access comprehensive career planning services utilizing this service to upload resumes for employers review, and for job search. Through the CSO, Employers are able to connect directly with students to review resumes of future hires.

**Student Employment Opportunities on Campus:** Students seeking employment on campus may obtain information about student worker/work-study positions on campus by contacting the Human Resources office or by visiting the TSTC Marshall website.

## Student Conduct and Discipline

### Student Conduct

The general morale of the student body is dependent upon many factors; among these are the success of its graduates, the attitude of faculty and administration, the general behavior of individual students, and the reputation of the College. TSTC believes a primary factor in strong student morale is an overall regard for good citizenship on the part of the student body. TSTC assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct and that they will observe these rules as a matter of training and habit.

TSTC regulations forbid gambling, the use of controlled substances and alcoholic beverages, and the appearance of anyone under the influence of any of these on the campus or when attending or participating in activities sponsored by the college. All TSTC buildings are tobacco free, with the exception of specifically-designated housing facilities.

Possession of firearms, illegal knives, and other prohibited weapons on TSTC facilities, including parking areas and publicly accessed facilities, is a violation of criminal law and TSTC policies. Persons who violate the law and these policies will be subject to serious consequences, including referral for criminal prosecution and dismissal from College.

Racial and/or sexual harassment of employees or students is not tolerated and is expressly prohibited at TSTC. Activities constituting ‘hazing’ are also prohibited. No person or organization may engage in, solicit, encourage, direct, aid, permit, or condone hazing, regardless of consent or acquiescence in any hazing activity.

No person or group of people acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on any campus or property of the TSTC System; further, the administration is charged with keeping the colleges free of disruptive activities and may take whatever disciplinary action is deemed necessary in instances of disruption or threat of disruption.

Students are expected to dress and groom themselves in an appropriate manner while on campus and while participating in activities sponsored by the College. Students whose conduct casts an unfavorable reflection upon the College, and thereby upon all students, are subject to disciplinary action.

Additional information on student conduct is available in the Student Handbook.

### Student Discipline Procedure

Any alleged violation or flagrant disregard of TSTC rules and regulations will be brought to the attention of the Associate Dean of the Learning Community Office or designated student disciplinary officer who will initiate an investigation of the situation. After a complete and thorough investigation, the Associate Dean of the Learning Community or designated disciplinary officer will determine the course of action. The Associate Dean of the Learning Community or disciplinary officer’s decision may be appealed through the appropriate college appeals process.

Additional information regarding policies and procedures relating to student conduct and discipline are available in the *TSTC Student Handbook*, which is available from Associate Dean of the Learning Community Office.

## General Information

### Buildings and Facilities

Texas State Technical College Marshall has two primary instructional facilities, a Student Housing complex and an Admissions/Administration building. The south building is a 90,000+ square foot learning center designed specifically for advanced and emerging technology studies with state of the art, industry standard equipment and laboratories that are designed to give students hands-on experience, preparing them for careers in the new global economy. This facility also houses the college Library which shares the TSTC System Vision of “strengthening the competitiveness of Texas business and industry by building the state’s capacity to develop the highest quality workforce.” The Library also supports the vision by
connecting people with ideas, in support of technical teaching and learning and workforce and economic development. The Library is furnished with the state-of-the-art technology and is the host for print and electronic databases that support the college curriculum. A second instructional facility is located approximately one-third mile north and contains 60,000 square feet of classrooms, laboratories and offices.

The Student Housing complex consists of 8 units that can house 202 residents. Residents have access to a housing commons area where students and their guests can gather to play pool, ping-pong, watch a large screen TV or visit in comfortable surroundings.

The Admission/Administration Building is a “one-stop” student enrollment center. The student can visit with the college recruiters, apply for admissions, apply for financial aid, pay tuition/fees, have an ID card made, and visit with the Business Office all under one roof. It also houses the President’s office, and the Human Resources and Institutional Effectiveness offices.

Instructional Philosophy

TSTC trains employees for tomorrow’s careers, helping to strengthen the economic competitiveness of Texas and improve the lives of its people. TSTC believes in “learning by thinking and doing.” Its curriculums give students the technical knowledge, skills, and abilities they need to be successful in their chosen careers. Its faculty members are highly qualified, with years of business and industry experience in their respective fields. And its facilities and equipment provide students with significant opportunities to apply what they learn.

Industry Advisory Committees

Industry Advisory Committees are an essential component of TSTC’s graduate success. Their members guide curriculum development by advising faculty on the skills, knowledge, and abilities that employees need. They help to create and equip facilities so students gain experiences that enhance their value to employers. Their on-going involvement ensures that TSTC students receive the right kind of education.

Institutional Research

Institutional research supports planning, evaluation, and improvement initiatives. Using paradigms from the social sciences and organizational and management theory, institutional research deals with a wide range of topics and issues critical to the health and advancement of the College. Institutional research collects and analyzes data; designs and implements studies dealing with students, personnel, facilities, equipment, programs, and services; develops databases suitable for longitudinal studies; and disseminates the results to be used for the betterment of TSTC and those that it serves.

Education Foundations

Two non-profit organizations have been created for the purpose of benefiting TSTC and its students. The Rolling Plains Technical Foundation, founded in 1973, is composed of West Central Texas leaders who focus their activities on supporting TSTC West Texas. The TSTC Regents Circle, founded in 2000, includes community and business leaders from throughout Texas whose work supports all the Colleges of the TSTC System. These two foundations provide invaluable financial assistance to TSTC students, as well as to TSTC as a whole.

Release of Student Records

In compliance with the “Family Education Rights and Privacy Act of 1974” (FERPA), TSTC gives notice that the following directory information will be released upon request and with the approval of the appropriate administrator, unless the student desires to withhold it: student's name, address, email address, telephone number, major field of study, classification of coursework level, enrollment status, extracurricular participation in officially recognized activities, achievement and academic awards or honors, weight and height of members of athletic teams, dates of attendance, photographic image, and most recent previous institution attended.

Release of additional student record information not defined as “directory information” must be specifically authorized by the student. Students may prohibit the release of directory information by completing the appropriate form available at www.tstc.edu • 888.382.8782
Admissions and Records Office during registration or prior to the official census day of the term. This request remains in effect until revoked in writing by the student.

Minors (under 18 years of age) attending TSTC have the same right to the privacy of their records as adult students.

Student academic records information, other than directory information, may be released to appropriate school officials without consent of the student. A school official can be:

1) an individual employed by TSTC in an administrative, supervisory, academic, research, or support staff position (including law enforcement and health staff personnel),
2) an individual elected to the TSTC Board of Regents,
3) an individual or company employed by or under contract to TSTC to perform a special task such as an attorney, auditor, or collection agency,
4) a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

Students have the right to inspect and review their academic record. Students may petition TSTC to amend or correct any part of their academic record which is believed to be inaccurate, misleading, or in violation of the privacy or other rights of the students. When the college decides it will not amend or correct a student’s record, the student has a right to a hearing to present evidence that the record is inaccurate, misleading, or in violation of the privacy or other rights of the student. Contact the Admissions and Records Office for more information regarding FERPA and student records.

**Compact With Texans**

Texas State Technical College (TSTC) is a public coeducational institution of higher education offering courses of study in technical education leading to the award of Certificates and Associate of Applied Science Degrees. TSTC also provides technical education and training to business and industry, continuing education to the public, and training programs for community and state economic development. TSTC colleges are located in Harlingen, Marshall, Sweetwater, and Waco, with extension centers in Abilene, Brownwood, and Breckenridge. TSTC serves students from more than 200 counties in Texas, and TSTC graduates begin their careers in high-paying jobs across the state or continue their education at colleges and universities. TSTC graduates are highly valued by business and industry for their work ethic, knowledge, and workplace skills. Texas State Technical Colleges are fully accredited by the Southern Association of Colleges and Schools.

**TSTC’s Vision**

The Texas State Technical College System will be a leader in strengthening the competitiveness of Texas business and industry by building the state’s capacity to develop the highest quality workforce.

**TSTC’s Values**

**Excellence**  Achieving the highest quality in all we do

**Leadership**  Developing the visions and strategies for a desired future, and aligning and energizing people to achieve those visions

**Innovation**  Creating and implementing new ideas and methods

**Collaboration**  Working cooperatively with other organizations and within our own system

**Responsiveness**  Providing appropriate programs and services in a proactive, flexible, and timely manner

**Accountability**  Measuring our performance and using the results for improvement

**Stewardship**  Ensuring our programs and services add value to our students and communities throughout the state, and operate in accordance with the public trust for which we are responsible

**TSTC’s Customer Service Goal**

It is the goal of Texas State Technical College faculty and staff to provide a level of customer service that is beyond expectation. We pledge to be . . .

**Friendly**  to all we meet in our work,

**Helpful**  in all that we do,

**Courteous**  in all of our dealings,

**Responsive**  to customers’ needs, and

**Accountable**  for our actions.

We will deliver the highest quality services possible with the highest regard for honesty, integrity, and ethical behavior.

For more information, please call or write to:

Texas State Technical College
2650 East End Blvd. South
Marshall, TX 75672
888-382-8782
903.935.1010
(http://www.tstc.edu)

www.tstc.edu • 888.382.8782
TSTC’s Formal Written Complaint Handling Procedure

Most questions or complaints can be addressed through routine college channels. If additional assistance is needed, you are encouraged to file a formal written complaint. TSTC is committed to your satisfaction. The Customer Service Representative for our college is Associate Dean of the Learning Community.

Submit your complaint in writing by filling out the Effective Customer Relations form. This form may be downloaded at www.marshall.tstc.edu, or obtained at Associate Dean of the Learning Community Office.

Alternatively, you may communicate verbally to TSTC’s Customer Service Representative at (888) 382-8782.

The TSTC Customer Service Representative will acknowledge your complaint and let you know the matter is receiving attention. You will be notified in writing within five working days of receiving the complaint as to the length of time it will take to resolve the issue.

The TSTC Customer Service Representative will investigate the complaint.

A solution that is consistent with TSTC policies, as well as applicable local, state, and federal laws, will be proposed to you in writing in the time frame specified in step 2.

You will be contacted by the Customer Service Representative within ten days of the written response to determine your satisfaction with the proposed solution and to be sure that the provisions of the solution have been implemented.

If you are not satisfied with the proposed solution, you may request that your complaint be considered by a Dispute Resolution Committee appointed by the college president. This committee will review all available documentation and render a decision as to the resolution of the complaint. All decisions of the committee are final and are not open to further review.

Texas Higher Education Coordinating Board Complaint Handling Procedure

Students have the right to complain to the Texas Higher Education Coordinating Board regarding the institution’s management of Title IV, HEAF (Higher Education Assistance Fund) programs, or its advertising or promotion of its educational programs. Complaints regarding the institution must be made in writing to: Texas Higher Education Coordinating Board, P.O. Box 12788, Austin, TX 78711.

Notes
Computer Integrated Manufacturing Technology

Programs of Study:

Basic Machining
Combination Welding
Computer Aided Drafting
Computer Aided Manufacturing
Quality Assurance
Enhanced Workplace Productivity

Basic Machining

The Basic Machining Certificate program is an entry level, 16 semester hour program that could lead to a 40 semester hour certificate and/or an Associate of Applied Sciences degree in Computer Aided Manufacturing. The program prepares basic machine operators in a machine shop. The fundamentals of general machine shop operations are introduced including lathe, milling, and basic CNC machine. This program is often used by local businesses to prepare new hires to begin work in their shops.

Basic Machining Certificate of Completion
Total Credits: 16

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td></td>
</tr>
<tr>
<td>DFTG 1325</td>
<td></td>
</tr>
<tr>
<td>MCHN 1320</td>
<td></td>
</tr>
<tr>
<td>MCHN 1338</td>
<td></td>
</tr>
<tr>
<td>MCHN 2431</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
</tr>
</tbody>
</table>

Combination Welding

Texas State Technical College Marshall offers a welding certificate that focuses on combination welding practices used in industry today. The program provides hands-on welding, layout, and fitting skills that are presently used and practiced in today’s technology advanced workforce. Extensive training in welding processes, oxy-fuel welding and cutting, shielded metal arc (SMAW) and gas metal arc (GMAW) provides the students with advance insight in understanding how the welding processes work and why certain welding processes are used. As a graduate, you may go to work as a welder in general fabrication shops, on construction sites, in pressure vessel shops or shipyards. In less than one year, the student has skills and knowledge required for the welder qualification test for the American Welding Society.

Combination Welding Certificate
Certificate of Completion
Total Credits: 30

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFTG 1325</td>
<td></td>
</tr>
<tr>
<td>WLDG 1340</td>
<td></td>
</tr>
<tr>
<td>WLDG 1453</td>
<td></td>
</tr>
<tr>
<td>WLDG 1457</td>
<td></td>
</tr>
<tr>
<td>WLDG 2406</td>
<td></td>
</tr>
<tr>
<td>WLDG 2413</td>
<td></td>
</tr>
<tr>
<td>WLDG 2443</td>
<td></td>
</tr>
<tr>
<td>WLDG 2447</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Computer Aided Drafting

Drafters prepare technical drawings and plans used by production and construction workers to build everything from manufactured products such as toys, toasters, industrial machinery, and spacecraft to structures such as houses, office buildings, and oil and gas pipelines.

Drafters’ drawings provide visual guidelines; show the technical details of the products and structures; and specify dimensions, materials, and procedures. Drafters fill in technical details using drawings, rough sketches, specifications, codes, and calculations previously made by engineers, surveyors, architects, or scientists. For example, drafters use their knowledge of standardized building techniques to draw in the details of a structure. Some use their knowledge of engineering and manufacturing theory and standards to draw the parts of a machine to determine design elements, such as the numbers and kinds of fasteners needed to assemble the machine. Drafters use technical handbooks, tables, calculators, and computers to complete their work.

Computer Aided Drafting
Associate of Applied Science Degree
Total Credits: 67

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCE 1352</td>
<td></td>
</tr>
<tr>
<td>BMGT 1309</td>
<td></td>
</tr>
<tr>
<td>BMGT 2347</td>
<td></td>
</tr>
<tr>
<td>DFTG 1305</td>
<td></td>
</tr>
<tr>
<td>DFTG 1309</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
</tr>
</tbody>
</table>
Computer Aided Manufacturing

Texas State Technical College  Computer Aided Manufacturing CAM program has a proven track record for helping students acquire the skills to manufacture world-class ultra-precision machined components and the skills needed in the manufacturing sector to fill thousands of high-paying, positions. At TSTC, you can develop the skills and knowledge sought by manufacturing industries, including commercial and military aircraft, medical, telecommunication, automotive and oil tool manufacturing.

In the CAM program at TSTC, you can progress through a series of machine tool operation courses to develop and challenge your process skills using conventional and Computer Numerical Controlled, or CNC machines. You will also learn about the various materials used in today’s manufacturing industry.

Today’s machinists can interpret complex drawings, select the appropriate materials and perform the machining processes to transform engineering concepts into quality, working components. Through a unique partnership with HAAS automation, CAM has established a regional training facility that enhances the learning experience. In this facility, you can learn CNC programming and operations.

## Computer Aided Manufacturing

### Associate of Applied Sciences Degree

<table>
<thead>
<tr>
<th>Total Credits: 70</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>BMGT 2347</td>
<td>Critical Thinking &amp; Problem Solving 3</td>
</tr>
<tr>
<td>DFTG 1309</td>
<td>Basic Computer Aided Drafting 3</td>
</tr>
<tr>
<td>DFTG 1325</td>
<td>Blueprint Reading &amp; Sketching 3</td>
</tr>
<tr>
<td>INMT 1311</td>
<td>Computer Integrated Manufacturing 3</td>
</tr>
<tr>
<td>MCHN 1320</td>
<td>Precision Tools &amp; Measurement 3</td>
</tr>
<tr>
<td>MCHN 1326</td>
<td>Introduction to Computer-Aided Manufacturing 3</td>
</tr>
<tr>
<td>MCHN 1338</td>
<td>Basic Machine Shop I 3</td>
</tr>
<tr>
<td>MCHN 1343</td>
<td>Machine Shop Mathematics 3</td>
</tr>
<tr>
<td>MCHN 1380</td>
<td>Co-op Ed. Machine Tool Technology 3</td>
</tr>
<tr>
<td>MCHN 1452</td>
<td>Intermediate Machining I 4</td>
</tr>
<tr>
<td>MCHN 2431</td>
<td>Operation of CNC Turning Centers 4</td>
</tr>
<tr>
<td>MCHN 2434</td>
<td>Operation of CNC Machining Centers 4</td>
</tr>
<tr>
<td>MCHN 2435</td>
<td>Advanced CNC Machining 4</td>
</tr>
<tr>
<td>POPI 1301</td>
<td>Computer Applications I 3</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td>WLDG 1337</td>
<td>Introduction to Metallurgy 3</td>
</tr>
</tbody>
</table>

| Sub Total | 55 |

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGM General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>ACGM English Elective</td>
<td>3</td>
</tr>
<tr>
<td>ACGM Natural Science &amp; Math Elective</td>
<td>3</td>
</tr>
<tr>
<td>ACGM Social &amp; Behavioral Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

| HUMA 1301 | Introduction to the Humanities 3 |
| HUMA 1314 | Sub Total 15 |

---

**Computer Aided Drafting Certificate of Completion**

**Total Credits: 31**

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>DFTG 1305</td>
<td>Technical Drafting 3</td>
</tr>
<tr>
<td>DFTG 1309</td>
<td>Basic Computer Aided Drafting 3</td>
</tr>
<tr>
<td>DFTG 1317</td>
<td>Architectural Drafting - Residential 3</td>
</tr>
<tr>
<td>DFTG 1329</td>
<td>Electro - Mechanical Drafting 3</td>
</tr>
<tr>
<td>DFTG 1333</td>
<td>Mechanical Drafting 3</td>
</tr>
<tr>
<td>DFTG 2319</td>
<td>Intermediate Computer Aided Drafting 3</td>
</tr>
<tr>
<td>DFTG 2340</td>
<td>Solid Modeling/Design 3</td>
</tr>
<tr>
<td>DFTG 2430</td>
<td>Civil Drafting 4</td>
</tr>
<tr>
<td>MCHN 1338</td>
<td>Basic Machine Shop I 3</td>
</tr>
</tbody>
</table>

| Total | 31 |

---

**Computer Integrated Manufacturing**

Computer Aided Manufacturing
Certificate of Completion
Total Credits: 40

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 2347</td>
<td>Critical Thinking &amp; Problem Solving 3</td>
</tr>
<tr>
<td>DFTG 1325</td>
<td>Blueprint Reading &amp; Sketching 3</td>
</tr>
<tr>
<td>MCHN 1338</td>
<td>Basic Machine Shop I 3</td>
</tr>
<tr>
<td>MCHN 2431</td>
<td>Operation of CNC Turning Centers 4</td>
</tr>
<tr>
<td>MCHN 2434</td>
<td>Precision Tools &amp; Measurement 4</td>
</tr>
<tr>
<td>MCHN 1452</td>
<td>Operation of CNC Machining Centers 4</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Intermediate Machining I 4</td>
</tr>
<tr>
<td>BMGT 1309</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td>WLDG 1337</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>MCHN 2435</td>
<td>Introduction to Metallurgy 3</td>
</tr>
<tr>
<td>POFI 1301</td>
<td>Advanced CNC Machining 4</td>
</tr>
</tbody>
</table>

Enhanced Workplace Productivity
Certificate of Completion
Total Credits: 30

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMCT 1307</td>
<td>High Performance Work Teams 3</td>
</tr>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>BMCT 1331</td>
<td>Production and Operations Management 3</td>
</tr>
<tr>
<td>BMCT 1341</td>
<td>Business Ethics 3</td>
</tr>
<tr>
<td>BMCT 2309</td>
<td>Leadership 3</td>
</tr>
<tr>
<td>BMCT 2347</td>
<td>Critical Thinking &amp; Problem Solving 3</td>
</tr>
<tr>
<td>HRPO 2307</td>
<td>Organizational Behavior 3</td>
</tr>
<tr>
<td>POFI 1301</td>
<td>Computer Applications I 3</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td>QCTC 1301</td>
<td>Total Quality Management 3</td>
</tr>
</tbody>
</table>

Total 30

Notes

www.tstc.edu • 888.382.8782
Computer Systems Networking

Programs of Study:

Computer Systems Desktop Support
Computer Systems/Networking Administration

Computer Systems Desktop Support

The Computer Systems Desktop Support Associate of Applied Science degree trains the candidate to support the information technology infrastructure of the new economy. Information Technology, once thought a luxury, is a mainstay of modern commerce and a requirement of the global marketplace. East Texas companies daily use modern data communications technology to participate in the global economy. The need for trained Desktop Support professionals to maintain and support the hardware and end users is more present than ever.

Area companies needing qualified include financial institutions such as banks, insurance companies, and accounting firms; educational institutions such as public school districts, private schools and colleges; area hospitals and medical offices; law offices; telecommunication companies such as cable, wireless carriers, and phone companies; municipal government offices; manufacturers; IT firms such as resellers, ISPs, software developers; and many other industries in the greater East Texas area.

A course of study in Computer Systems Desktop Support will include training on basic hardware and operating systems. This will cover skills such as installing, building, upgrading, repairing, configuring, troubleshooting, and preventive maintenance. Additional areas of training include soft skills, security, and networking.

Computer Systems Desktop Support
Associate of Applied Science Degree
Total Credits: 66

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPMT 131</td>
<td>Introduction to Computer Maintenance</td>
</tr>
<tr>
<td>CPMT 1345</td>
<td>Computer Systems Maintenance</td>
</tr>
<tr>
<td>CPMT 1347</td>
<td>Computer System Peripherals</td>
</tr>
<tr>
<td>CPMT 2345</td>
<td>Computer System Troubleshooting</td>
</tr>
<tr>
<td>CSIR 1359</td>
<td>Digital Data Communication OR</td>
</tr>
<tr>
<td>EECT 1307</td>
<td>Convergence Technologies</td>
</tr>
<tr>
<td>EECT 1300</td>
<td>Technical Customer Service</td>
</tr>
<tr>
<td>EECT 1303</td>
<td>Introduction to Telecommunications</td>
</tr>
<tr>
<td>ITNW 1308</td>
<td>Implementing &amp; Supporting Client Operating Systems</td>
</tr>
<tr>
<td>ITNW 1325</td>
<td>Fundamentals of Networking/Technologies</td>
</tr>
<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
</tr>
<tr>
<td>ITSC 1316</td>
<td>Linux Installation and Configuration OR</td>
</tr>
<tr>
<td>ITSC 1358</td>
<td>UNIX System Administration I</td>
</tr>
<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
</tr>
<tr>
<td>ITSC 2370</td>
<td>Final Project: Systems Administration OR</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 1316</td>
<td>Plane Trigonometry</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
</tr>
<tr>
<td></td>
<td>Sub Total</td>
</tr>
</tbody>
</table>

Computer Systems Desktop Support
Certificate of Completion
Total Credits 42

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPMT 1311</td>
<td>Introduction to Computer Maintenance</td>
</tr>
<tr>
<td>CPMT 1345</td>
<td>Computer Systems Maintenance</td>
</tr>
<tr>
<td>CPMT 1347</td>
<td>Computer System Peripherals</td>
</tr>
<tr>
<td>CPMT 2345</td>
<td>Computer System Troubleshooting</td>
</tr>
<tr>
<td>EECT 1300</td>
<td>Technical Customer Service</td>
</tr>
<tr>
<td>ITNW 1308</td>
<td>Implementing &amp; Supporting Client Operating Systems</td>
</tr>
<tr>
<td>ITNW 1325</td>
<td>Fundamentals of Networking/Technologies</td>
</tr>
<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
</tr>
<tr>
<td>ITSC 1316</td>
<td>Linux Installation and Configuration OR</td>
</tr>
<tr>
<td>ITSC 1358</td>
<td>UNIX System Administration I</td>
</tr>
<tr>
<td>ITSC 1329</td>
<td>Programming Logic &amp; Design</td>
</tr>
<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
</tr>
<tr>
<td>ITSW 1307</td>
<td>Introduction to Database</td>
</tr>
<tr>
<td>ITSY 1342</td>
<td>Information Technology Security</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

Computer Systems/Networking Administration

The Computer Systems Network Administration Associate of Applied Science degree prepares the candidate to support business information technology needs in the global economy. Data communications networks, once thought a luxury, are a mainstay of modern commerce and a requirement of the global marketplace. East Texas companies daily use modern data communications technology to remain competitive. The need for trained network technicians to maintain these data communication networks is more present than ever.

Area companies needing qualified personnel include financial institutions such as banks, insurance companies, and accounting firms; educational institutions such as public school districts, private schools and colleges; area hospitals and medical offices; law offices; telecommunication companies such as cable, wireless carriers, and phone companies; municipal government offices; manufacturers; IT firms such as resellers, ISPs, software developers; and many other industries in the greater East Texas area.
A course of study in Computer Systems Network Administration will include training in skills needed to install, configure, and troubleshoot basic networking hardware, peripherals, and protocols. Training also includes basic PC hardware and operating system installation, configuration and support. Additional areas of study include network operating systems, and network administration.

The Computer Systems Networking program require that students demonstrate basic reading, writing and mathematical skills before enrolling.

**Computer Systems / Networking Administration Associate of Applied Science Degree**

**Total Credits: 69**

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309 Information &amp; Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CPMT 1311 Introduction to Computer Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>CPMT 1345 Computer Systems Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>CSIR 1359 Digital Data Communication OR</td>
<td></td>
</tr>
<tr>
<td>EECT 1307 Convergence Technologies</td>
<td>3</td>
</tr>
<tr>
<td>EECT 1303 Introduction to Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1305 Introduction to PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1316 Linux Installation and Configuration</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1309 Integrated Software Applications I</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 2370 Final Project: Systems Administration OR</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 2387 Internship - Computer and Information Sciences, General</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 1308 Implementing &amp; Supporting Client Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 1325 Fundamentals of Networking / Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 1353 Supporting Network Server Infrastructure OR</td>
<td></td>
</tr>
<tr>
<td>ITSC 1347 UNIX System Administration II</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 2305 Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 2312 Routers OR</td>
<td></td>
</tr>
<tr>
<td>ITNW 2321 Networking with TCP/IP</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1329 Programming Logic &amp; Design</td>
<td>3</td>
</tr>
<tr>
<td>ITSY 1342 Information Technology Security</td>
<td>3</td>
</tr>
<tr>
<td>LAWT 1301 Copyright &amp; Ethical Issues</td>
<td>3</td>
</tr>
<tr>
<td>PSYT 1313 Psychology of Personal Adjustment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 1301 Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1314 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1316 Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2301 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Notes**
Diesel Equipment Technology

Programs of Study:

Diesel Equipment Technology
Diesel Engine Repair
Intro to Diesel Equipment Technology

Diesel Equipment Technology

The Diesel Equipment Technology program at TSTC Marshall provides skilled and knowledgeable entry-level employees to heavy equipment industries all over East Texas. From maintenance to engine specialists, to field technicians, employers actively seek out TSTC Marshall’s Diesel graduates.

Excavators, dump trucks, bulldozers, BobCats, tractors, these monstrous machines that construct our highways, shopping centers and homes are advanced machines that require well-trained and highly skilled technicians to repair and maintain them. Cooperative work opportunities within the industry allow students to experience different types of jobs before graduating. A degree from TSTC pays off. Most Diesel Equipment Technology students are employed by their last semester and every graduate from this program is working full time.

Experience the power! Experience the power of becoming a much-in-demand, qualified Diesel Equipment Technology graduate. Trucking, construction, agriculture, airline ground support services, off-shore drilling, forestry, and marine and public transportation all depend on diesel power. With the increased use of highly sophisticated pneumatic, hydraulic, and electronic systems on heavy equipment today, successful students find many opportunities for employment.

At Texas State Technical College Marshall, the Diesel Equipment Technology program provides superior educational training on the latest industry-standard equipment.

Diesel Equipment Technology
Associate of Applied Science Degree
Total Credits: 72

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>DEMR 1317</td>
<td>Basic Brake Systems 3</td>
</tr>
<tr>
<td>DEMR 1321</td>
<td>Power Train I 3</td>
</tr>
<tr>
<td>DEMR 1323</td>
<td>Heating, Ventilation &amp; Air Conditioning Troubleshooting &amp; Repair 3</td>
</tr>
<tr>
<td>DEMR 1330</td>
<td>Steering and Suspension I 3</td>
</tr>
<tr>
<td>DEMR 1405</td>
<td>Basic Electrical Systems 4</td>
</tr>
<tr>
<td>DEMR 1435</td>
<td>Auto Power Shift &amp; Hydrostatic Transmissions I 4</td>
</tr>
<tr>
<td>DEMR 1449</td>
<td>Diesel Engine II 4</td>
</tr>
<tr>
<td>DEMR 2334</td>
<td>Advanced Diesel Tune-up &amp; Troubleshooting 3</td>
</tr>
<tr>
<td>DEMR 2335</td>
<td>Advanced Hydraulics 3</td>
</tr>
</tbody>
</table>

Demar 2348 Failure Analysis 3
Demar 2432 Electronic Controls 4
Hemr 1304 Natural Gas Compression 3
Hemr 1401 Tracks & Undercarriages 4
Hydr 1305 Basic Hydraulics 3
Poh 1301 Computer Applications I 3
Wldg 1307 Introduction to Welding Using Multiple Processes 3

Sub Total 57

General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL X3XX</td>
<td>English Elective 3</td>
</tr>
<tr>
<td>Huma 1301</td>
<td>Introduction to the Humanities 3</td>
</tr>
<tr>
<td>Math X3XX</td>
<td>Approved College Math 3</td>
</tr>
<tr>
<td>Psyc X3XX</td>
<td>Social &amp; Behavioral Science Elective 3</td>
</tr>
<tr>
<td>Acad X3XX</td>
<td>General Education Elective 3</td>
</tr>
</tbody>
</table>

Sub Total 15

Diesel Equipment Technology
Certificate of Completion
Total Credits 41

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demar 1317</td>
<td>Basic Brake Systems 3</td>
</tr>
<tr>
<td>Demar 1321</td>
<td>Power Train I 3</td>
</tr>
<tr>
<td>Demar 1323</td>
<td>Heating, Ventilation &amp; Air Conditioning Troubleshooting &amp; Repair 3</td>
</tr>
<tr>
<td>Demar 1330</td>
<td>Steering and Suspension I 3</td>
</tr>
<tr>
<td>Demar 1405</td>
<td>Basic Electrical Systems 4</td>
</tr>
<tr>
<td>Demar 1449</td>
<td>Diesel Engine II 4</td>
</tr>
<tr>
<td>Demar 2334</td>
<td>Advanced Diesel Tune-up &amp; Troubleshooting 3</td>
</tr>
<tr>
<td>Demar 2432</td>
<td>Electronic Controls 4</td>
</tr>
</tbody>
</table>

Sub Total 41

Diesel Engine Repair
Certificate of Completion
Total Credits 18

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demar 1330</td>
<td>Steering and Suspension I 3</td>
</tr>
<tr>
<td>Demar 1405</td>
<td>Basic Electrical Systems 4</td>
</tr>
<tr>
<td>Demar 1449</td>
<td>Diesel Engine II 4</td>
</tr>
<tr>
<td>Demar 2334</td>
<td>Advanced Diesel Tune-up &amp; Troubleshooting 3</td>
</tr>
<tr>
<td>Demar 2432</td>
<td>Electronic Controls 4</td>
</tr>
</tbody>
</table>

Sub Total 18

Intro to Diesel Equipment Technology
Certificate of Completion
Total Credits 27

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demar 1330</td>
<td>Steering and Suspension I 3</td>
</tr>
<tr>
<td>Demar 1321</td>
<td>Power Train I 3</td>
</tr>
<tr>
<td>Demar 1323</td>
<td>Heating, Ventilation &amp; Air Conditioning Troubleshooting &amp; Repair 3</td>
</tr>
<tr>
<td>Demar 1449</td>
<td>Diesel Engine II 4</td>
</tr>
<tr>
<td>Demar 2334</td>
<td>Advanced Diesel Tune-up &amp; Troubleshooting 3</td>
</tr>
<tr>
<td>Demar 1405</td>
<td>Basic Electrical Systems 4</td>
</tr>
<tr>
<td>Demar 1435</td>
<td>Auto Power Shift &amp; Hydrostatic Transmissions I 4</td>
</tr>
<tr>
<td>Hydr 1305</td>
<td>Basic Hydraulics 3</td>
</tr>
</tbody>
</table>

Sub Total 27

www.tstc.edu • 888.382.8782
Environmental Health and Safety

Programs of Study:

Construction Safety Management
Enhanced Skills Certificate
Environmental Health and Safety
Environmental Health and Safety
EHS Phase 1 Certificate
Environmental Health and Safety
EHS Phase 2 Certificate

Environmental Health and Safety

According to the American Electronics Association and NASDAQ, the Texas State Technical College System is one of only four colleges in Texas to rank in the top 50 nationwide for engineering degrees and engineering technology.

As a student in the Environmental Health and Safety program, you can train for a career as a safety professional to assist companies establish programs to prevent industrial and occupational injuries. Environmental Health and Safety technologists are responsible for interpreting safety regulations, policies and procedures and for enforcing government safety codes.

The Environmental Health and Safety program is designed to give you the training you need to help companies comply with current Occupational Safety and Health Admin-istration (OSHA), Environmental Protection Agency (EPA), Department of Transportation (DOT), and State of Texas regulations, codes and standards.

An important job requires serious and specific training, educational training that Texas State Technical College Marshall offers in its Environmental Health and Safety program.

Environmental Health and Safety
Associate of Applied Science Degree
Total Credits: 68

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>EPCT 1305</td>
<td>Environmental Regulations Overview 3</td>
</tr>
<tr>
<td>EPCT 1313</td>
<td>Contingency Planning 3</td>
</tr>
<tr>
<td>EPCT 1341</td>
<td>Principles of Industrial Hygiene 3</td>
</tr>
<tr>
<td>OSHT 1307</td>
<td>Construction Site Safety &amp; Health 3</td>
</tr>
<tr>
<td>OSHT 1313</td>
<td>Accident Prevention, Inspection &amp; Investigation 3</td>
</tr>
<tr>
<td>OSHT 1316</td>
<td>Material Handling 3</td>
</tr>
<tr>
<td>OSHT 1321</td>
<td>Fire Protection Systems 3</td>
</tr>
<tr>
<td>OSHT 2309</td>
<td>Safety Program Management 3</td>
</tr>
<tr>
<td>OSHT 2310</td>
<td>Principles of Safety Engineering 3</td>
</tr>
<tr>
<td>OSHT 2320</td>
<td>Safety Training Presentation Techniques 3</td>
</tr>
<tr>
<td>OSHT 2388</td>
<td>Internship OSHST Technician 3</td>
</tr>
<tr>
<td>OSHT 2401</td>
<td>OSHA Regulations - General Industry 4</td>
</tr>
<tr>
<td>POFI 1301</td>
<td>Computer Applications I 3</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td>ELCT X3XX</td>
<td>OSHST/EPCT 3</td>
</tr>
<tr>
<td></td>
<td>Sub Total 49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIT 1414</td>
<td>Chemistry 4</td>
</tr>
<tr>
<td>ELCT X3XX</td>
<td>English - Advisor Approved 3</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities 3</td>
</tr>
<tr>
<td>ELCT X3XX</td>
<td>Mathematics - Advisor Approved 3</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods 3</td>
</tr>
<tr>
<td>ELCT X3XX</td>
<td>Social Science - Advisor Approved 3</td>
</tr>
<tr>
<td></td>
<td>Sub Total 19</td>
</tr>
</tbody>
</table>

Environmental Health and Safety
EHS Phase 1 Certificate
Certificate of Completion

Our Certificate 1 and 2 are designed to be stepping stones to our AAS degree. However we realize from experience that students may only want to learn certain skills with will enable them to succeed in the workplace and don't have time to complete a degree at this time.

Certificate 1 will provide the basic EHS skills that most employers seek for their employees.

Below are the requirements for Certificate 1.
Total Credits: 19

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>EPCT 1305</td>
<td>Environmental Regulations Overview 3</td>
</tr>
<tr>
<td>OSHT 2310</td>
<td>Principles of Safety Engineering 3</td>
</tr>
<tr>
<td>OSHT 2401</td>
<td>OSHA Regulations - General Industry 4</td>
</tr>
<tr>
<td>POFI 1301</td>
<td>Computer Applications I 3</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td></td>
<td>Total 19</td>
</tr>
</tbody>
</table>
Environmental Health and Safety
EHS Phase 2 Certificate
Certificate of Completion

Our Certificate 1 and 2 are designed to be stepping stones to our AAS degree. However we realize from experience that students may only want to learn certain skills with will enable them to succeed in the workplace and don’t have time to complete a degree at this time.

Certificate 2 is intended to enhance knowledge and skills achieved as a result of completing Certificate 1, or to provide him/her with the ability to accomplish tasks and functions, which could normally be assigned to an experienced employee in the industrial or construction workplace as relates to environmental health and safety compliance in their workplace.
A person attempting this certificate is expected to possess a basic knowledge of safety issues, policies and procedures that relate to the industrial workplace.

Below are the requirements of Certificate 2.
Total Credits: 44

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>EPCT 1305</td>
<td>Environmental Regulations Overview 3</td>
</tr>
<tr>
<td>EPCT 1313</td>
<td>Contingency Planning 3</td>
</tr>
<tr>
<td>EPCT 1341</td>
<td>Principles of Industrial Hygiene 3</td>
</tr>
<tr>
<td>OSHT 1307</td>
<td>Construction Site Safety &amp; Health 3</td>
</tr>
<tr>
<td>OSHT 1313</td>
<td>Accident Prevention, Inspection &amp; Investigation 3</td>
</tr>
<tr>
<td>OSHT 1316</td>
<td>Material Handling 3</td>
</tr>
<tr>
<td>OSHT 2209</td>
<td>Safety Program Management 3</td>
</tr>
<tr>
<td>OSHT 2310</td>
<td>Principles of Safety Engineering 3</td>
</tr>
<tr>
<td>OSHT 2320</td>
<td>Safety Training Presentation Techniques 3</td>
</tr>
<tr>
<td>OSHT 2401</td>
<td>OSHA Regulations - General Industry 4</td>
</tr>
<tr>
<td>POFI 1301</td>
<td>Computer Applications I</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td>SCIT 1414</td>
<td>Chemistry 4</td>
</tr>
<tr>
<td></td>
<td>Total 44</td>
</tr>
</tbody>
</table>

Construction Safety Management
Enhanced Skills Certificate:

If the graduate from the EHS AAS degree desires to pursue a career in the Construction Industry as a safety professional this enhanced skills certificate will provide those additional skills needed for the construction industry.

Only a graduate holding an EHS AAS degree may apply for this certificate for Construction Safety Management.

Below are the requirements of the Enhanced Skills Certificate.
Total Credits: 13

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNBT 1311</td>
<td>Construction Methods &amp; Materials 3</td>
</tr>
<tr>
<td>CNBT 1342</td>
<td>Building Codes &amp; Inspections 3</td>
</tr>
<tr>
<td>CNBT 1346</td>
<td>Construction Estimating I 3</td>
</tr>
<tr>
<td>CNBT 2442</td>
<td>Construction Management I 4</td>
</tr>
<tr>
<td></td>
<td>Total 13</td>
</tr>
</tbody>
</table>

Notes
Industrial Technology

Programs of Study:

Electric Utility Construction and Maintenance
Industrial Electrical Technician
Industrial Maintenance Mechanic
Industrial Mechatronics Technician
Introduction to Industrial Maintenance

Electric Utility Construction & Maintenance

Congratulations if you are considering a career as a utility lineman. You have selected one of the highest paying and most exciting trades that exist. Texas State Technical College’s Electric Utility Construction & Maintenance Certificate is an intensive training program that is designed for men and women who are actively pursuing a career as a lineman.

The Electric Utility Construction & Maintenance Certificate prepares individuals to work as lineman in the construction, maintenance, and repair of electric utility overhead and underground systems. Students combine electrical distribution system classroom study with laboratory and practical applications. Students will be expected to master competencies such as electrical distribution safety work practices; basic electrical theory; overhead pole line and underground electrical construction operation and maintenance; fundamentals of electric power systems management; and electrical distribution equipment installation and installation of residential/commercial service metering.

Upon successful completion of the program, individuals will receive a Certificate and will possess the necessary skills for employment in the field of Electric Utility Distribution Lineman.

Electric Utility Construction & Maintenance Certificate of Completion
Total Credits: 42

1st Semester
Course Title | Credits
--- | ---
LNWK | 1301  Orientation and Line Skill Fundamentals 3
ELPT | 1321  Introduction to Electrical Safety and Tools 3
LNWK | 1311  Climbing Skills (D-100) 3
ELPT | 1480  Cooperative Education 4

2nd Semester
ELPT | 1319  Fundamentals of Electricity I 3
ELPT | 2233  Transformers 3
LNWK | 2322  Distribution Line Construction (D-200) 3
ELPT | 1481  Cooperative Education 4

3rd Semester
CVOPT | 1245  Commercial Drivers License Overview 2
CVOPT | 2209  Semi Tractor-Trailer Operator Driving Skills 2
CVOPT | 2233  Advanced Driving Skills I 2
CVOPT | 2237  Advanced Driving Skills II 3
ELPT | 2339  Electrical Power Distribution (D-300) 3
ELPT | 2480  Cooperative Education 4

Program Entrance Requirements that must be completed prior to registration:
1. THEA http://www.marshall.tstc.edu/welcome/thea.shtml testing is required. THEA scores must be passing or place student in the highest level of developmental coursework in all three areas (Math 200, Reading 200 and Writing 200)
2. Demonstrated electrical pole climbing ability using fall restraint

Industrial Electrical Technician

The Industrial Electrical Technician program offers the latest in electrical technology as it applies to industry. This program selectively blends the mechanical and electrical specialties needed to produce a highly qualified electrician meeting industrial standards. You gain electrical knowledge and skills in electrical installation and wiring, single-phase and three-phase power distribution, motion and motor control systems, programmable logic controllers, transformers and electrical machines, and AC/DC variable speed drives. These skills are combined with mechanical skills necessary to produce a highly qualified industrial electrician.

Industrial Electrical Technician
Associate of Applied Science Degree
Total Credits: 69

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMCT</td>
<td>2347</td>
</tr>
<tr>
<td>CETT</td>
<td>1325</td>
</tr>
<tr>
<td>CETT</td>
<td>1333</td>
</tr>
<tr>
<td>DFPT</td>
<td>1325</td>
</tr>
<tr>
<td>ELPT</td>
<td>1319</td>
</tr>
<tr>
<td>ELPT</td>
<td>1320</td>
</tr>
<tr>
<td>ELPT</td>
<td>1341</td>
</tr>
<tr>
<td>ELPT</td>
<td>1345</td>
</tr>
<tr>
<td>ELPT</td>
<td>1351</td>
</tr>
</tbody>
</table>

www.tstc.edu • 888.382.8782
Industrial Mechatronics Technician

Mechatronics is a new interdisciplinary field involving mechanical, instrumentation, electronic, robotics/automation, computer components and control systems. Because industrial applications are becoming increasingly multidisciplinary, today’s technicians need skills that cross a variety of disciplines. Mechatronics courses combine various disciplines to teach students a holistic approach to developing solutions for engineering applications.

Businesses and industries are asking for graduates with Mechatronics skills and problem solving abilities. Mechatronics does not map to any particular trade or job category; rather, it refers to a host of integrated skills that can be applied in a variety of job contexts. Furthermore, there is an expanding demand for bilingual technicians and team leaders with Mechatronics knowledge and experience in companies in Texas and surrounding regions. Skills found under the Mechatronics Technology umbrella includes "practical" knowledge in the integration of electrical systems, fluid power, electronics, computer controls, PLCs, instrumentation, robotics and information technology.

Industrial Mechatronics Technician
Associate of Applied Science Degree
Total Credits: 69

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 2347</td>
<td>Critical Thinking &amp; Problem Solving 3</td>
</tr>
<tr>
<td>CETT 1333</td>
<td>Introduction to Computer &amp; CAD Operations 3</td>
</tr>
<tr>
<td>DFTG 1325</td>
<td>Blueprint Reading &amp; Sketching 3</td>
</tr>
<tr>
<td>ELPT 1319</td>
<td>Fundamentals of Electricity I 3</td>
</tr>
<tr>
<td>ELPT 1320</td>
<td>Fundamentals of Electricity II 3</td>
</tr>
<tr>
<td>ELPT 1341</td>
<td>Motor Control 3</td>
</tr>
<tr>
<td>ELPT 1345</td>
<td>Commercial Wiring 3</td>
</tr>
<tr>
<td>ELPT 2319</td>
<td>Programmable Logic Controllers 3</td>
</tr>
<tr>
<td>HYDR 1305</td>
<td>Basic Hydraulics 3</td>
</tr>
<tr>
<td>HYDR 1345</td>
<td>Hydraulics &amp; Pneumatics 3</td>
</tr>
<tr>
<td>INMT 1305</td>
<td>Introduction to Industrial Maintenance 3</td>
</tr>
<tr>
<td>INMT 2301</td>
<td>Machinery Installation 3</td>
</tr>
<tr>
<td>INMT 2303</td>
<td>Pumps, Compressors &amp; Mechanical Drives 3</td>
</tr>
<tr>
<td>INMT 2345</td>
<td>Industrial Troubleshooting 3</td>
</tr>
<tr>
<td>MCHN 1338</td>
<td>Basic Machine Shop I 3</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td>TECH X3XX</td>
<td>Approved Technical Elective 3</td>
</tr>
<tr>
<td>WLDG 1307</td>
<td>Introduction to Welding Using Multiple Processes 3</td>
</tr>
<tr>
<td></td>
<td>Sub Total 54</td>
</tr>
</tbody>
</table>

General Education Requirements

| ENGL 1301          | Composition I 3 |
| HUMA 1301          | Introduction to the Humanities 3 |
| MATH 1314          | College Algebra 3 |
| PSYC 2303          | Business Psychology 3 |
| ACAD X3XX          | Approved Math or Science Academic Elective 3 |
|                    | Sub Total 15 |

Total Credits: 71

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CETT 1325</td>
<td>Digital Fundamentals 3</td>
</tr>
<tr>
<td>CETT 1333</td>
<td>Introduction to Computer &amp; CAD Operations 3</td>
</tr>
<tr>
<td>CETT 1341</td>
<td>Solid State Circuits 3</td>
</tr>
<tr>
<td>DFTG 1325</td>
<td>Blueprint Reading &amp; Sketching 3</td>
</tr>
<tr>
<td>ELPT 1341</td>
<td>Motor Control 3</td>
</tr>
<tr>
<td>ELPT 2319</td>
<td>Programmable Logic Controllers 3</td>
</tr>
<tr>
<td>HYDR 1305</td>
<td>Basic Hydraulics 3</td>
</tr>
<tr>
<td>INMT 1305</td>
<td>Introduction to Industrial Maintenance 3</td>
</tr>
<tr>
<td>MCHN 1338</td>
<td>Basic Machine Shop I 3</td>
</tr>
<tr>
<td>MCHN 2403</td>
<td>Fund. of CNC Machine Controls 3</td>
</tr>
<tr>
<td>RBTC 1305</td>
<td>Robotics Fundamentals 3</td>
</tr>
<tr>
<td>TECH X3XX</td>
<td>Approved Technical Elective 3</td>
</tr>
<tr>
<td>TECH X3XX</td>
<td>Approved Technical Elective 3</td>
</tr>
<tr>
<td>TECH X3XX</td>
<td>Approved Technical Elective 3</td>
</tr>
<tr>
<td>TECH X3XX</td>
<td>Approved Technical Elective 3</td>
</tr>
<tr>
<td></td>
<td>Sub Total 53</td>
</tr>
</tbody>
</table>

General Education Requirements

| ENGL 1301          | Composition I 3 |
| HUMA 1301          | Introduction to the Humanities 3 |
| MATH 1314          | College Algebra 3 |
| PSYC 2301          | General Psychology OR 3 |
| PSYC 2303          | Business Psychology 3 |
| SCIT 1318          | Applied Physics I 3 |
| ACAD X3XX          | Approved Math or Science Academic Elective 3 |
|                    | Sub Total 18 |
Introduction to Industrial Maintenance

The Introduction to Industrial Maintenance specialization is a certificate program that offers just the technical courses needed to begin work in industry. The program includes courses in hydraulics, pneumatics, pumps and compressors, machinery installation and alignment, motor controls, electrical wiring, air conditioning and refrigeration, machine shop, and welding.

Introduction to Industrial Maintenance
Certificate of Completion
Total Credits: 39

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFTG 1325</td>
<td>3</td>
</tr>
<tr>
<td>ELPT 1319</td>
<td>3</td>
</tr>
<tr>
<td>ELPT 1320</td>
<td>3</td>
</tr>
<tr>
<td>ELPT 1341</td>
<td>3</td>
</tr>
<tr>
<td>ELPT 1345</td>
<td>3</td>
</tr>
<tr>
<td>HYDR 1305</td>
<td>3</td>
</tr>
<tr>
<td>HYDR 1345</td>
<td>3</td>
</tr>
<tr>
<td>INMT 1305</td>
<td>3</td>
</tr>
<tr>
<td>INMT 2345</td>
<td>3</td>
</tr>
<tr>
<td>INMT 2301</td>
<td>3</td>
</tr>
<tr>
<td>INMT 2303</td>
<td>3</td>
</tr>
<tr>
<td>MCHN 1338</td>
<td>3</td>
</tr>
<tr>
<td>WLDG 1307</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blueprint Reading &amp; Sketching</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Electricity I</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Electricity II</td>
<td>3</td>
</tr>
<tr>
<td>Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>Commercial Wiring</td>
<td>3</td>
</tr>
<tr>
<td>Basic Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>Hydraulics &amp; Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Industrial Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>Machinery Installation</td>
<td>3</td>
</tr>
<tr>
<td>Pumps, Compressors &amp; Mechanical Drives</td>
<td>3</td>
</tr>
<tr>
<td>Basic Machine Shop I</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Welding Using Multiple Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 39

Notes
Instrumentation, Process Operations Technology

Programs of Study:

Biomedical Equipment Technology
Introduction to Industrial Technology
Instrumentation
Process Operations Technician

Biomedical Equipment Technology

Hospitals and medical centers stay active around the clock, and medical personnel rely on advanced biomedical equipment to make the difference when life is literally hanging in the balance. They demand that the equipment be repaired quickly and maintained in first-class condition to avoid malfunctions that might slow down or stop medical procedures.

The up-keep and repair of this equipment requires highly skilled technicians, professionals dedicated to precise work-professionals like the graduates of the Biomedical Equipment Technology (BET) program at Texas State Technical College. TSTC’s program can show you the way to an exciting and challenging career as a biomedical equipment technician. This is a career with a future. The aging population will increase the need for medical care and the demand for these technicians.

As a student in this highly specialized field, you can learn to inspect, calibrate, maintain, troubleshoot, repair and modify electronic, mechanical and electro-mechanical equipment used in the medical and health care industry. Students gain knowledge and experience working with everything from the simplest suction pump to the most sophisticated laboratory equipment, cardiac monitors, x-ray and ultrasound equipment.

Biomedical Equipment Technology
Associate of Applied Science Degree
Total Credits: 62

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM 1309</td>
<td>Applied Biomedical Equipment Technology 3</td>
</tr>
<tr>
<td>BIOM 1315</td>
<td>Medical Equipment Networks 3</td>
</tr>
<tr>
<td>BIOM 134</td>
<td>Medical Circuits/ Troubleshooting 3</td>
</tr>
<tr>
<td>BIOM 135</td>
<td>Diagnostic Ultrasound Imaging System 3</td>
</tr>
<tr>
<td>BIOM 1355</td>
<td>Medical Electronic Applications 3</td>
</tr>
<tr>
<td>BIOM 2249</td>
<td>Basic X-Ray &amp; Medical Imaging Equipment 2</td>
</tr>
<tr>
<td>BIOM 2289</td>
<td>Internship Biomedical Technology/Technician 2</td>
</tr>
<tr>
<td>BIOM 2331</td>
<td>Biomedical Clinical Instrumentation 3</td>
</tr>
<tr>
<td>BIOM 2335</td>
<td>Physiological Instruments I 3</td>
</tr>
<tr>
<td>BIOM 2357</td>
<td>Respiratory Equipment Maintenance 3</td>
</tr>
<tr>
<td>BIOM 2364</td>
<td>General Medical Equipment I 3</td>
</tr>
<tr>
<td>CETT 1325</td>
<td>Digital Fundamentals 3</td>
</tr>
<tr>
<td>CETT 1333</td>
<td>Introduction to Computer CAD Operations 3</td>
</tr>
<tr>
<td>CETT 1341</td>
<td>Solid State Circuits 3</td>
</tr>
<tr>
<td>CETT 1409</td>
<td>DC - AC Circuits 4</td>
</tr>
<tr>
<td>ENTR X3XX</td>
<td>Approved Enterprise Elective 3</td>
</tr>
</tbody>
</table>

Sub Total 7

General Education Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>1305 Introductory Chemistry I</td>
<td></td>
</tr>
<tr>
<td>ENGL</td>
<td>1301 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HUMA</td>
<td>1301 Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>XXX Approved College Math</td>
<td>3</td>
</tr>
<tr>
<td>PSYC</td>
<td>230 Business Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Sub Total 15

Biomedical Equipment Technology Proficiency Enhanced Skills Certificate
Total Credits: 9

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM 2301</td>
<td>Safety in Health Care Facilities 3</td>
</tr>
<tr>
<td>BIOM 2357</td>
<td>Biomedical Equipment Technician Proficiency Review 3</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods 3</td>
</tr>
</tbody>
</table>

Total 9

Introduction to Industrial Technology

The Introduction to Industrial Technology certificate of completion is an interdisciplinary award covering several basic concepts needed by individuals in instrumentation, industrial/electrical, and manufacturing fields. Many of these courses are offered virtually through distance learning/web-based course delivery. It is an award which can be helpful for people in industry and manufacturing who want to improve their basic knowledge over a wide area. The Introduction to Industrial Technology certificate is also a great certificate for a person interested in fine-tuning his/her knowledge of basic industrial maintenance or manufacturing principles. The successful graduate will be better equipped to enter a wide variety of industrial and manufacturing positions.

Introduction to Industrial Technology
Certificate of Completion
Total Credits: 36

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CETT 1303</td>
<td>DC Circuits 3</td>
</tr>
<tr>
<td>CETT 1305</td>
<td>AC Circuits 3</td>
</tr>
<tr>
<td>CETT 1325</td>
<td>Digital Fundamentals 3</td>
</tr>
<tr>
<td>CETT 1329</td>
<td>Solid State Devices 3</td>
</tr>
<tr>
<td>CETT 1345</td>
<td>Microprocessor 3</td>
</tr>
<tr>
<td>DFTR 1319</td>
<td>Basic Computer Aided Drafting 3</td>
</tr>
<tr>
<td>ELPT 1319</td>
<td>Fundamentals of Electricity I 3</td>
</tr>
<tr>
<td>INMT 1305</td>
<td>Introduction to Industrial Maintenance 3</td>
</tr>
</tbody>
</table>

Sub Total 24

General Education Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL</td>
<td>1301 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL</td>
<td>1302 Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>1314 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>1316 Plane Trigonometry</td>
<td>3</td>
</tr>
</tbody>
</table>

Sub Total 12
Instrumentation

Instrumentation covers several fields of study—from the distribution of electricity to an assortment of control applications including computers, smart transmitters, fiber optics, programmable logic controllers, field buses, robotics, and more. TSTC designed the program to prepare graduates to work in the areas of engineering and design; installation and calibration; maintenance, testing and troubleshooting; computer instrumentation and robotic interfacing; networking; sales; and electrical construction.

The term instrumentation technician includes a broad range of duties and responsibilities within the instrumentation field. The job title may include instrument technician, instrument repairman, instrument planner, nuclear instrumentation technician, instrument foreman, and instrument supervisor or junior instrument engineer.

Instrumentation technician may also identify the area of work such as power plant, nuclear power plant, chemical industry, tobacco industry, paper and wood pulp, research and development, electronics, aircraft, water treatment, biomedical, aerospace and many others.

Instrument technicians troubleshoot, maintain, repair, replace and install process control and manufacturing equipment to produce quality products and ensure environmental protection, safety and cost-effective operations. Technicians work with pneumatic, mechanical, electronic and computer based process control equipment.

Industrial firms are recruiting men and women as entry-level employees who can apply mathematical concepts, communicate complex ideas, compose accurate and correct reports, solve problems, and be self motivated.

Instrumentation

Associate of Applied Science Degree

Total Credits: 69

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CETT 1303</td>
<td>DC Circuits</td>
</tr>
<tr>
<td>CETT 1305</td>
<td>AC Circuits</td>
</tr>
<tr>
<td>CETT 1325</td>
<td>Digital Fundamentals</td>
</tr>
<tr>
<td>CETT 1333</td>
<td>Introduction to Computer &amp; CAD Operations</td>
</tr>
<tr>
<td>CETT 1341</td>
<td>Solid State Circuits</td>
</tr>
<tr>
<td>ELPT 1341</td>
<td>Motor Control</td>
</tr>
<tr>
<td>ELPT 1351</td>
<td>Electrical Machines</td>
</tr>
<tr>
<td>ELPT 2319</td>
<td>Programmable Logic Controllers</td>
</tr>
<tr>
<td>ELPT 2331</td>
<td>AC/DC Drives</td>
</tr>
<tr>
<td>ENTR X3XX</td>
<td>Approved Enterprise Elective</td>
</tr>
<tr>
<td>ENTR X3XX</td>
<td>Approved Enterprise Elective</td>
</tr>
<tr>
<td>INCR 1344</td>
<td>Instrumentation Repair</td>
</tr>
<tr>
<td>INMT 1305</td>
<td>Introduction to Industrial Maintenance</td>
</tr>
<tr>
<td>INTC 1341</td>
<td>Principles of Automatic Control</td>
</tr>
<tr>
<td>INTC 1355</td>
<td>Unit Operations</td>
</tr>
<tr>
<td>INTC 1356</td>
<td>Instrument Calibration</td>
</tr>
<tr>
<td>INTC 2336</td>
<td>Distributed Control &amp; Programmable Logic</td>
</tr>
</tbody>
</table>

General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACAD</td>
<td>Approved Math or Science Academic Elective</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MATH X3XX</td>
<td>Approved College Math</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2303</td>
<td>Business Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Sub Total: 54

Process Operations Technician

A process technician is a key member of a team of people responsible for planning, analyzing, and controlling the production of products from the acquisition of raw materials through the production and distribution of products to customers in a variety of process industries. These industries include, but are not limited to, chemical, food and beverage, oil exploration and production, pharmaceuticals, power generation, pulp and paper, refining and wastewater treatment.

Process Operations technicians are the backbone of industry. They are responsible for efficient and safe operation of all process equipment within the plant, monitoring of all process and utility systems and equipment to ensure they operate within their proper parameters, collection of product and utility samples and performing lab analysis to ensure products meet specifications, provide ownership and responsibility for an area of the facility while on shift to ensure the safety of all who work this area through adherence to policies and procedures, preparation of equipment and systems for maintenance activities, and performance of minor mechanical and/or maintenance activities on equipment and systems.

Process Operations Technician

Associate of Applied Science Degree

Total Credits: 68

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POFI 1301</td>
<td>Computer Applications</td>
</tr>
<tr>
<td>ENTR X3XX</td>
<td>Approved Enterprise Elective</td>
</tr>
<tr>
<td>ENTR X3XX</td>
<td>Approved Enterprise Elective</td>
</tr>
<tr>
<td>PTAC 1302</td>
<td>Introduction to Process Technology</td>
</tr>
<tr>
<td>PTAC 1308</td>
<td>Safety, Health &amp; Environment I</td>
</tr>
<tr>
<td>PTAC 1332</td>
<td>Process Instrumentation I</td>
</tr>
<tr>
<td>PTAC 1410</td>
<td>Process Technology I - Equipment</td>
</tr>
<tr>
<td>PTAC 2314</td>
<td>Principles of Quality</td>
</tr>
<tr>
<td>PTAC 2336</td>
<td>Process Instrumentation II</td>
</tr>
<tr>
<td>PTAC 2420</td>
<td>Process Technology II - Systems</td>
</tr>
<tr>
<td>PTAC 2438</td>
<td>Process Technology III - Operations</td>
</tr>
<tr>
<td>PTAC 2446</td>
<td>Process Troubleshooting</td>
</tr>
<tr>
<td>PTAC 2438</td>
<td>Safety, Health &amp; Environment II</td>
</tr>
<tr>
<td>PRTT 1301</td>
<td>Overview of Petroleum Industry</td>
</tr>
<tr>
<td>SCIT 1318</td>
<td>Applied Physics I</td>
</tr>
<tr>
<td>TECH X3XX</td>
<td>Approved Technical Elective</td>
</tr>
</tbody>
</table>

Total: 52

General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1411</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MATH X3XX</td>
<td>Approved College Math</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2303</td>
<td>Business Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 16

www.tstc.edu • 888.382.8782
Software Engineering Technology

Programs of Study:

Multimedia Publishing
Office Technology
Software Engineering
Webmaster

Multimedia Publishing

Multimedia Publishing is an exciting field that touches every aspect of today's business community. From personnel to marketing to sales, Multimedia Publishers provide dynamic communication tools that drive their businesses.

Learning the art of effective communication through the use of graphics design, image editing, computer assisted voice, video editing, and data communications is your gateway to an exciting and rewarding career.

Our programs are loaded with cutting-edge technology, state-of-the-art equipment, engaging course work and a confident, enthusiastic staff! We are thrilled to offer you the opportunity to become a major player in the field by having mastered the following technologies:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML</td>
<td>Macromedia Authorware 7</td>
</tr>
<tr>
<td>CSS</td>
<td>Macromedia Director MX 2004</td>
</tr>
<tr>
<td>C</td>
<td>Macromedia Dreamweaver 8</td>
</tr>
<tr>
<td>Adobe Photoshop CS2</td>
<td>Adobe Audition</td>
</tr>
<tr>
<td>Adobe ImageReadyCS2</td>
<td>Adobe Captivate</td>
</tr>
<tr>
<td>Macromedia Flash Professional 8</td>
<td>Quark Express 7.0</td>
</tr>
</tbody>
</table>

The Multimedia Publishing degree also includes general academic and soft skill courses to complement the technical skill set to create a well rounded individual ready to hit the ground running in industry.

If you are interested in this program of study take a look at our Webmaster Technology degree as well. In as little as one additional semester you can obtain this second degree to become a Multimedia Specialist with web programming and web design capabilities.

Multimedia Publishing
Associate of Applied Science Degree
Total Credits: 71

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1302 Digital Imaging I</td>
<td>3</td>
</tr>
<tr>
<td>ARTC 1313 Digital Publishing I</td>
<td>3</td>
</tr>
<tr>
<td>ARTC 2305 Digital Imaging II</td>
<td>3</td>
</tr>
<tr>
<td>ARTV 1351 Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>ARTV 2341 Advanced Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>BMCT 1309 Information &amp; Project Management</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1301 Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1305 Multimedia Courseware Development I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1316 Web Design I OR</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1301 Web Design Tools</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1345 Interactive Multimedia I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2305 Multimedia Courseware Development II</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2311 Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2313 Project Analysis &amp; Design</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2349 Internet Communications</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1305 Introduction to PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1309 Integrated Software Applications I</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1329 Programming Logic &amp; Design OR</td>
<td>3</td>
</tr>
<tr>
<td>ELECT X3XX A technical elective with advisor's approval</td>
<td>3</td>
</tr>
<tr>
<td>LAWT 1201 Copyright &amp; Ethical Issues</td>
<td>2</td>
</tr>
<tr>
<td>PSYT 1313 Psychology of Personal Adjustment</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td>56</td>
</tr>
</tbody>
</table>

General Education Requirements

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301 Composition I</td>
</tr>
<tr>
<td>HUMA 130 Introduction to the Humanities</td>
</tr>
<tr>
<td>MATH 1314 College Algebra</td>
</tr>
<tr>
<td>MATH 1316 Plane Trigonometry OR</td>
</tr>
<tr>
<td>ELECT X3XX A college level math with Advisor's Approval</td>
</tr>
<tr>
<td>PSYC 2301 General Psychology OR</td>
</tr>
<tr>
<td>PSYC 2303 Business Psychology</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
</tr>
</tbody>
</table>

Office Technology

The Office Technology program at TSTC Marshall is tailored to meet the growing needs of individuals either currently working or those seeking entry-level positions in office administration. We offer a variety of courses that enable our students to become proficient in word processing, spreadsheets, database management, both visual and verbal presentation, as well as basic accounting and web design. Upon completion of their coursework, our students are required to complete Microsoft Office Specialist (MOS) certification exams in Word and Excel, which are industry recognized standards for excellence.

Office Technology
Associate of Applied Science Degree
Total Credits: 65

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2301 Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ARTC 1313 Digital Publishing I OR</td>
<td>3</td>
</tr>
<tr>
<td>POFI 2331 Desktop Publishing</td>
<td>3</td>
</tr>
</tbody>
</table>

www.tstc.edu • 888.382.8782
The SET degree provides an effective mix of courses to create well balanced computer programmers; we focus on concepts and techniques that are applicable to any programming language as well as detailed functionalities of the following technologies:

**Programming Languages**
- C
- C++
- C# .NET
- Visual Basic.NET
- ADO.NET
- Crystal Reports
- Java

**Database Systems**
- MS Access
- SQL Server
- MySQL
- Oracle

The SET degree also includes general academic and soft skill courses to compliment the technical skill set to create a well rounded individual ready to hit the ground running in industry. If you are interested in this program of study take a look at our Webmaster Technology degree as well. In as little as two additional semesters you can obtain a second degree to become a key player in the industry as a software engineer with web development and multimedia publishing skills as well.

This is a large industry and your opportunity to become a major player has never been better!

**Software Engineering**

**Associate of Applied Science Degree**

**Total Credits: 68**

**Major Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1309</td>
<td>Information &amp; Project Management 3</td>
</tr>
<tr>
<td>BMGT 1325</td>
<td>Office Management 3</td>
</tr>
<tr>
<td>HRPO 2307</td>
<td>Organizational Behavior 3</td>
</tr>
<tr>
<td>IMED 1316</td>
<td>Web Design I OR 3</td>
</tr>
<tr>
<td>ITSE 1301</td>
<td>Web Design Tools 3</td>
</tr>
<tr>
<td>ITSE 1309</td>
<td>Integrated Software Applications I 3</td>
</tr>
<tr>
<td>ITSE 2321</td>
<td>Integrated Software Applications II 3</td>
</tr>
<tr>
<td>ITSW 1307</td>
<td>Introduction to Database 3</td>
</tr>
<tr>
<td>LAWT 1201</td>
<td>Copyright &amp; Ethical Issues 2</td>
</tr>
<tr>
<td>POFT 1329</td>
<td>Beginning Keyboarding 3</td>
</tr>
<tr>
<td>PSYT 1313</td>
<td>Psychology of Personal Adjustment 3</td>
</tr>
<tr>
<td>ELECT X3XX</td>
<td>Two Technical Electives 6</td>
</tr>
<tr>
<td>ELECT X3XX</td>
<td>with Advisor's Approval 6</td>
</tr>
</tbody>
</table>

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I 3</td>
</tr>
<tr>
<td>ENGL 2311</td>
<td>Technical &amp; Business Writing 3</td>
</tr>
<tr>
<td>MATH X3XX</td>
<td>Approved College Math 3</td>
</tr>
</tbody>
</table>

**Software Engineering Technology**

Software Engineering Technology is a challenging field that offers a wide variety of career opportunities. As a Software Engineering Technician, you have the freedom to choose your particular niche in the computer industry. You can major in software development or simply specialize in Windows programming, UNIX programming, mobile device programming or installation, maintenance and/or training. As varied as the career opportunities are, so is your earning potential.
Webmaster

Technology is expanding at an increasingly high speed due to the successful growth of the Internet. The World Wide Web has taken a strong hold on the vast majority of businesses and organizations, becoming a principal means of marketing and providing information. The number of Web sites in use increases every minute skyrocketing job opportunities for Web site developers and designers - Webmasters. Today’s companies seek professionals with the skills and training to produce effective Web sites that can attract the billions of consumers surfing the Web every day.

The Webmaster degree provides an effective mix of courses to create a well balanced Web designer and Web developer. This program of study includes the following technologies:

<table>
<thead>
<tr>
<th>Languages</th>
<th>Multimedia Tools</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML</td>
<td>Adobe Photoshop</td>
<td>MS Access</td>
</tr>
<tr>
<td>CSS</td>
<td>Adobe ImageReady</td>
<td>MS SQL Server</td>
</tr>
<tr>
<td>C</td>
<td>Abode Flash</td>
<td>MySQL</td>
</tr>
<tr>
<td>PHP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASP.NET</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Webmaster degree also includes general academic and soft skill courses to compliment the technical skill set to create a well rounded individual ready to hit the ground running in industry. The skills impacted in the Webmaster degree are the same concepts and techniques that created e-Commerce giants such as Ebay, Netflix, MySpace, and Amazon.

If you are interested in this program of study take a look at our Multimedia Publishing and Software Engineering Technology degrees as well. In as little as one additional semester you can obtain one of these degrees to become a Webmaster/Multimedia specialist or Webmaster/Software engineer specialist.

This is a large industry and your opportunity to become a major player has never been better!

Webmaster
Associate of Applied Science Degree
Total Credits: 71

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTC 1302 Digital Imaging I</td>
<td>3</td>
</tr>
<tr>
<td>ARTC 2305 Digital Imaging II</td>
<td>3</td>
</tr>
<tr>
<td>BMGT 1309 Information &amp; Project Management</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1301 Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1345 Interactive Multimedia I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1316 Web Design I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2315 Web Design II</td>
<td>3</td>
</tr>
<tr>
<td>INEW 2334 Advanced Web Page Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 1325 Fundamentals of Networking / Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1305 Introduction to PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1309 Integrated Software Applications I</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1302 Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1306 PHP Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1329 Programming Logic &amp; Design</td>
<td>3</td>
</tr>
<tr>
<td>ITSW 1307 Introduction to Database</td>
<td>3</td>
</tr>
<tr>
<td>ITSW 2337 Advanced Database</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1201 Copyright &amp; Ethical Issues</td>
<td>2</td>
</tr>
<tr>
<td>PSYT 1313 Psychology of Personal Adjustment</td>
<td>3</td>
</tr>
<tr>
<td>ELECT X3XX One Technical Elective with Advisor’s Approval</td>
<td>3</td>
</tr>
<tr>
<td>Sub Total</td>
<td>56</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 1301 Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1314 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1342 Elementary Statistical Methods OR</td>
<td>3</td>
</tr>
<tr>
<td>ELECT X3XX A College level math with Advisor’s Approval</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2301 General Psychology OR</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2303 Business Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Sub Total</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
</tr>
</tbody>
</table>

Notes
Course Descriptions

Example: Developmental Math - DMTH (0-4-3)

<table>
<thead>
<tr>
<th>EXPLANATION OF ITEMS IN COURSE DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Prefix</td>
</tr>
<tr>
<td>Course Number</td>
</tr>
<tr>
<td>Course Title</td>
</tr>
<tr>
<td>Lecture Hours Each Week</td>
</tr>
<tr>
<td>Lab Hours Each Week</td>
</tr>
<tr>
<td>Semester Hour Credit</td>
</tr>
</tbody>
</table>

Description-This course reviews the fundamentals of mathematics, including whole numbers, fractions, decimals, and percents. Additional topics may include proportions, units of measure, data interpretation and analysis, and basic geometry. (Developmental/No college credit granted) Prerequisite: THEA or THEA alternative.

Developmental Education Courses

Developmental Math - DMTH

DMTH 0050 Basic Mathematics (1-3-3) This course reviews the fundamentals of mathematics, including whole numbers, fractions, decimals, and percents. Additional topics may include proportions, units of measure, data interpretation and analysis, and basic geometry. (Developmental/No college credit granted) Prerequisite: DMTH 0050 or equivalent as determined by THEA or THEA alternative.

DMTH 0100 Introductory Algebra (1-3-3) This course gives students an introduction to the fundamentals of algebra, which include real numbers, equations and inequalities, graphs, polynomials, and factoring. (Developmental/No college credit granted) Prerequisite: DMTH 0050 or equivalent as determined by THEA or THEA alternative.

DMTH 0200 Intermediate Algebra (3-1-3) This course is a continuation of DMTH 0100. Topics to be studied are rational expressions, graphing equations, systems of equations, radicals, and quadratic equations. (Developmental/No college credit granted) Prerequisite: DMTH 0100 or equivalent as determined by THEA or THEA alternative.

Developmental Orientation - DORI

DORI 0100 College Success Skills (0-2-1) This course is designed to build personal and academic success skills and to provide students with self-knowledge essential for workplace success and life-long learning. Topics covered include: an overview of college resources, procedures and policies; the development of an enthusiasm for learning; study and test-taking skills; critical thinking; memory, reading, and note taking skills; self-analysis and self-discipline. (Developmental/No college credit granted).

Developmental Reading - READ

READ 0050 Basic Reading Skills (3-1-3) This is a fundamental reading course designed for students who need intensive, diagnostic-based instruction in basic word attack skills, vocabulary development, and basic comprehension strands. (Developmental/No college credit granted.) Prerequisite: THEA or THEA alternative.

READ 0100 Reading Skills I (1-3-3) This is an introductory reading course. Course objectives emphasize skill development and/or refinement in basic skill areas, which include literal, interpretive, and evaluative comprehension, vocabulary, and the application of study skills to reading assignments. (Developmental/No college credit granted.) Prerequisite: READ 0050 or equivalent as determined by THEA or THEA alternative.

READ 0200 Reading Skills II (2-2-3) This course is a continuation of READ 0100. Emphasis is placed upon skills that are essential to success in academic and technical/occupational fields of study. (Developmental/No college credit granted) Prerequisite: READ 0100 or equivalent as determined by THEA or THEA alternative.

READ 0803 Reading Lab (0-X-X) This course is designed for students to participate in remedial studies on an individual basis. Course content is customized to each student’s specific deficiencies. Semester credit hours vary depending on students’ specific needs. Course may be repeated for credit. (Developmental/No college credit granted) Prerequisite: Permission from the instructor.

Developmental Writing - WRIT

WRIT 0050 Basic Writing Skills (2-2-3) This introductory course covers the fundamentals of written communication skills. It includes an emphasis on language, usage, mechanics, spelling, punctuation, and intensive studies in the parts of speech. (Developmental/No college credit granted.) Prerequisite: THEA or THEA alternative.

WRIT 0100 Writing Skills I (2-2-3) This course includes a review of grammar and mechanical skills, an emphasis on punctuation patterns and sentence construction, type, and variety, and concentration in paragraph structure, organization, writing, and revising. (Developmental/No college credit granted.) Prerequisite: WRIT 0050 or equivalent as determined by THEA or THEA alternative.

WRIT 0200 Writing Skills II (3-1-3) This course is a continuation of WRIT 0100. Course objectives emphasize the writing process, specifically, idea generation, essay development, and basic
forms of expository writing. (Developmental/No college credit granted.) Prerequisite: WRIT 0100 or equivalent as determined by THEA or THEA alternative.

Academic Courses

Accounting - ACCT

ACCT 2301 Principles of Accounting I (2-2-3) Accounting concepts and their application in transaction analysis and financial statement preparation; analysis of financial statements; and asset and equity accounting in proprietorships, partnerships, and corporations. Introduction to cost behavior, budgeting, responsibility accounting, cost control, and product costing. Prerequisite: DMTH 0200.

Biology - BIOL

BIOL 2406 Environmental Biology (3-3-4) Human interaction with and effect upon plant and animal communities. Conservation, pollution, energy, and other contemporary ecological problems. Prerequisite: READ 0200.

Chemistry - CHEM

CHEM 1305 Introductory Chemistry I (3-0-3) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students. Prerequisite: DMTH 0200. TO BE TAKEN WITH CHEM 1105.

CHEM-1411 General Chemistry I (3-3-4) Basic principles are introduced. Emphasis is placed on fundamental laws, atomic structure, bonding, acids and bases, selected elements and their compounds. Prerequisite: DMTH 0200.

English - ENGL

Engl 1301 Composition I (3-0-3) Principles and techniques of written, expository, and persuasive composition; analysis of literary, expository, and persuasive texts; and critical thinking. Prerequisite: THEA/THEA alternative test scores or WRIT 0200.

Engl 1302 Composition II (3-0-3) Continuation of ENGL 1301. Principles and techniques of written, expository, and persuasive composition; analysis of literary, expository, and persuasive texts; and critical thinking. Prerequisite: ENGL 1301.

Engl 1311 Business English (3-0-3) Principles, techniques, and skills needed for college level scientific, technical, or business writing. Prerequisite: Required placement test or equivalent test scores or WRIT 0200.

Engl 2311 Technical and Business Writing (3-0-3) Principles, techniques, and skills needed for college level scientific, technical, or business writing. Prerequisite: ENGL 1301.

Government - GOVT

GOVT 2305 Federal Government (3-0-3) Introduction to the theory and practice of politics and government in America at the national, state, and local levels, with special attention to Texas. Topics include political theory, the American and Texas constitutions, federalism, political participation and elections, the institutions of government, and domestic and foreign policies. Prerequisite: READ 0200 or equivalent as determined by placement test or equivalent test.

GOVT 2306 Texas Government (3-0-3) Introduction to the theory and practice of politics and government in America at the national, state, and local levels, with special attention to Texas. Topics include political theory, the American and Texas constitutions, federalism, political participation and elections, the institutions of government, and domestic and foreign policies. Prerequisite: READ 0200.

History - HIST

HIST 1301 United States History I (3-0-3) Survey of the political, social, economic, military, cultural, and intellectual history of the United States from the discovery of America to the present. Prerequisite: READ 0200.

Humanities - HUMA

HUMA 1301 Introduction to the Humanities (3-0-3) An interdisciplinary, multi-perspective assessment of cultural, political, philosophical, and aesthetic factors critical to the formation of values and the historical development of the individual and of society. Students will prepare and present both written and oral reports. Prerequisites: READ 0200.

Mathematics - MATH

MATH 1314 College Algebra (3-0-3) A study of quadratics; polynomial, rational, logarithmic, and exponential functions; systems of equations; progressions; sequences and series; and matrices and determinants. Prerequisite: DMTH 0200 or equivalent as determined THEA/THEA alternative test.

MATH 1316 Plane Trigonometry (3-0-3) Trigonometric functions, identities, equations, and applications. Prerequisite: MATH 1314 or equivalent as determined by THEA/THEA alternative test.

MATH 1324 Finite Math for Business (3-0-3) Sets, probability, functions, inequalities, linear programming, and differential and integral calculus with applications. Prerequisite: MATH 1314 or equivalent as determined by THEA/THEA alternative test.
MATH 1332 College Mathematics (3-0-3) Modern algebra and geometry. Topics may include sets, logic, number systems, number theory, functions, equivalence, congruence, measurement, other geometric concepts, and the introduction to probability and statistics. Prerequisite: DMTH 0200 or equivalent as determined by THEA/THEA alternative test.

MATH 1342 Elementary Statistical Methods (3-0-3) Presentation and interpretation of data, probability, sampling, correlation and regression, analysis of variance, and the use of statistical software. Prerequisite: DMTH 0200, or equivalent as determined by THEA/THEA alternative test.

MATH 2313 Calculus I (3-0-3) Functions, limits, continuity, differentiation, integration, applications, sequences and series, vector analysis, partial differentiation, and multiple integration. This course may include topics in analytic geometry. Prerequisite: MATH 1316.

Physics - PHYS

PHYS 1310 Elementary Physics (3-0-3) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory. Presents special topics in classical physics, such as basic mechanics, optics, acoustics, or electricity. Prerequisite: DMTH 0200 or above.

PHYS 1401 College Physics (3-3-4) Algebra-level physics sequence, with laboratories, that includes study of mechanics, heat, waves, electricity and magnetism, and modern physics. Prerequisite: MATH 1316.

Psychology - PSYC

PSYC 2301 General Psychology (3-0-3) A survey of the major topics in psychology, introducing the study of behavior and the factors that determine and affect behavior. Prerequisite: READ 0200 or equivalent as determined by THEA/THEA alternative test.

PSYC 2303 Business Psychology (3-0-3) Survey of the application of psychological knowledge and methods in such fields as business, industry, education, medicine, law enforcement, social work, and government work. Prerequisite: READ 0200 or equivalent as determined by THEA/THEA alternative test.

Speech - SPCH

SPCH 1311 Introduction to Speech Communication (3-0-3) Theories and practice of communication in interpersonal, small group, and public speech. Prerequisite: READ 0200.

SPCH 1315 Public Speaking (3-0-3) Research, composition, organization, delivery, and analysis of speeches for various purposes and occasions. READ 0200.

SPCH 1321 Business and Professional Speaking (3-0-3) Theories and practice of speech communication as applied to business and professional situations. READ 0200.

Technical Courses

ARCE

ARCE 1352 Structural Drafting (2-4-3) A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute.

ARTC

ARTC 1302 Digital Imaging I (2-4-3) Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Prerequisite: DMTH 0100, WRIT 0100, READ 0100.

ARTC 1313 Digital Publishing I (2-4-3) The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout. Prerequisite: DMTH 0100, READ 0100, WRIT 0100.

ARTC 2305 Digital Imaging II (2-4-3) Principles of digital image processing and electronic painting. Emphasis on bitmapped- or raster-based image marking and the creative aspects of electronic illustration for commercial and fine art applications. Prerequisite: ARTC 1302.

ARTV

ARTV 1351 Digital Video (2-4-3) Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a desktop digital video workstation. Prerequisites: DMTH 0100, READ 0200, WRIT 0100.


BIOM

BIOM 1281 Cooperative Education - Biomedical Technology/Technician(0-9-2) Career-related activities encountered in the
student’s area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

BIOM 1309 Applied Biomedical Equipment Technology (2-4-3) Introduction to biomedical instrumentation as related to anatomy and physiology. Detailed coverage of anatomical systems that use medical equipment for monitoring, diagnosis, and treatment. Prerequisites: DMTH 0200, READ 0200, WRIT 0200.

BIOM 1315 Medical Equipment Networks (2-4-3) Identification of basic principles of medical equipment networking. Hardware, software, and connectivity issues of medical equipment in healthcare facilities will be covered. Prerequisite: CETT 1305.

BIOM 1341 Medical Circuits/Troubleshooting (2-4-3) Development of skills in logical isolation of troubles in malfunctioning medical electronic circuits and utilization of appropriate test equipment. Prerequisite: CETT 1341.

BIOM 1350 Diagnostic Ultrasound Imaging System (2-4-3) A course in diagnostic ultrasound imaging systems. Basic systems troubleshooting and problem solving are covered. Prerequisite: CETT 1305.

BIOM 1355 Medical Electronic Applications (2-4-3) Presentation of sensors, transducers, and supporting circuits used in medical instrumentation devices. Prerequisite: CETT 1305.

BIOM 2249 Basic X-Ray and Medical Imaging Systems (1-4-2) A study of radiation theory and safety hazards, fundamental circuits and application of X-ray systems including circuit analysis, troubleshooting, and isolation of system malfunctions. Prerequisite: BIOM 2341.

BIOM 2289 Internship – Biomedical Technology/Technician (0-10-2) A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: BIOM 2341.

BIOM 2301 Safety in Health Care Facilities (2-2-3) Study of codes, standards and management principles related to biomedical instrumentation. Emphasize on the proper use and application of safety test equipment, preventive maintenance procedures, and documentation of work performed. Prerequisites: DMTH 0200, READ 0200, WRIT 0200, Permission of Program Chair.

BIOM 2331 Biomedical Clinical Instrumentation (2-4-3) A study of theory, application, and principles of operation of instruments commonly used in a medical laboratory. Prerequisite: CETT 1341.

BIOM 2335 Physiological Instruments I (2-4-3) Introduction to electrocardiographic equipment. Emphasis on the theory of operation, circuit analysis, and troubleshooting techniques including physiology of the cardiovascular system. Prerequisite: CETT 1341.

BIOM 2337 Respiratory Equipment Maintenance (2-4-3) A study of the principles of operation, theory, and maintenance of respiratory equipment. Prerequisite: CETT 1341.

BIOM 2341 General Medical Equipment I (2-4-3) Extraction of selected current paths from a larger schematic with requirements to redraw into the proper configuration. Discussion of motors and disassembly and reassembly of equipment. Prerequisite: CETT 1341.

BIOM 2357 Biomedical Equipment Technician (BMET) Proficiency Review (2-4-3) An overview of the certification examination topics for biomedical equipment technicians. Prerequisite: CETT 1341.

BMGT

BMGT 1307 High Performance Work Teams (1-2-3) Basic principles of building and sustaining teams in organizations including team dynamics and process improvement. DMTH 0050, READ 0050, WRIT0050.

BMGT 1309 Information and Project Management (2-2-3) Information and project management including task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision. Prerequisite: DMTH 0050, READ 0050, WRIT 0050.

BMGT 1325 Office Management (3-0-3) Systems, procedures, and practices related to organizing and planning office work, controlling employees’ performance, and exercising leadership skills. Prerequisite: DMTH 0050, READ 0050, WRIT 0050.

BMGT 1331 Production and Operations Management (2-2-3) Fundamentals of the various techniques used in the practice of production management to include location, design, and resource allocation.

BMGT 1341 Business Ethics (2-2-3) Discussion of ethical issues, the development of a moral frame of reference and the need for an awareness of social justice in management practices and business activities. Review of ethical responsibilities and relationships between organizational departments, divisions, executive management, and the public.

BMGT 2309 Leadership (1-2-3) Concepts of leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify. Prerequisite: DMTH 0050, READ 0050, WRIT 0050.
BMGT 2347 Critical Thinking and Problem Solving (3-0-3)
Instruction in interpreting data for effective problem solving and recommending corrective action with emphasis on a structured approach to critical thinking and problem solving in a team environment. Prerequisite: DMTH 0050, READ 0050, WRIT 0050.

CETT

CETT 1303 DC Circuits (2-4-3) A study of the fundamentals of direct current including Ohm’s law, Kirchoff’s laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. Prerequisites: DMTH 0200, READ 0200, WRIT 0200.

CETT 1305 AC Circuits (2-4-3) A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Prerequisites: CETT 1303.

CETT 1409 DC-AC Circuits (2-6-3) Fundamentals of DC circuits and AC circuits operation including Ohm’s law, Kirchoff’s laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. Co-requisite: DMTH 0100.

CETT 1325 Digital Fundamentals (2-4-3) An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Prerequisite: CETT 1303.

CETT 1329/1429 Solid State Devices (2-4-3) A study of diodes and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations. Prerequisite: CETT 1409.

CETT 1341 Solid State Circuits (2-4-3) A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Prerequisite: CETT 1305.

CETT 1345 Microprocessor (2-4-3) An Introductory Course in Microprocessor Software and Hardware; Its Architecture, Timing Sequence, Operation, and Programming; And Discussion of Appropriate Software Diagnostic Languages And Tools.

CNBT

CNBT 1311 Construction Methods and Materials (2-2-3) An introduction to construction materials and methods and their applications. Included in this course are various construction issues that may arise on a job site and the legal implications and governing bodies that influence the construction process. Storm Water and Clean Air Regulations, Trenching/Excavation Methods, Confined Spaces, Underground Utilities, Blasting and Demolition, Crane and Rigging, ADA and general job site hazard recognition will also be addressed. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

CNBT 1342 Building Codes and Inspections (2-3-3) Building codes and standards applicable to building construction and inspection processes. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

CNBT 1346 Construction Estimating I (2-2-3) Fundamentals of estimating materials and labor costs in construction. Prerequisites: DMTH 0050, READ 0050.

CNBT 2442 Construction Management I (3-2-4) Human relations management skills in motivation on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making. Prerequisites: READ 0050.

CPMT

CPMT 1311 Introduction to Computer Maintenance (2-4-3) An introduction to the installation, configuration, and maintenance of a microcomputer system. Emphasis on the evolution of microprocessors and microprocessor bus structures. Prerequisite: DMTH 0200, READ 0200, WRIT 0200, EECT 1303.

CPMT 1345 Computer Systems Maintenance (2-4-3) Examination of the functions of the components within a computer system. Development of skills in the use of test equipment and maintenance aids. Prerequisite: CPMT 1311.

CPMT 1347 Computer System Peripherals (1-6-3) Theory and practices involved in computer peripherals, operation and maintenance techniques, and the use of specialized test equipment. Emphasis is placed on the theory of operation and maintenance of computer peripheral devices.

CPMT 2250 Industry Certification Preparation (1-3-2) Overview of the objectives for industry specific certification exam(s).

CPMT 2345 Computer System Troubleshooting (1-6-3) Principles and practices involved in computer system troubleshooting techniques and repair procedures including advanced diagnostic test programs and the use of specialized test equipment.

CPMT 2350 Industry Certification Preparation (2-3-3) Overview of the objectives for industry specific certification exams(s).
CSIR

CSIR 1359 Digital Data Communication (2-4-3) Introduction to the theory and troubleshooting skills needed in the digital data communication field. Prerequisite: EECT 1303.

CSIR 2359 Communication Antenna Systems (2-4-3) A course in the testing and troubleshooting procedures for communication antennas systems including combiners, multi couplers, and duplexers. Topics include lightning and grounding requirements as well as identifying radio frequency interference and electromagnetic interference. Prerequisite: CSET 1305 or CSET 1405.

CTEC

CTEC 1449 Environmental Chemistry (2-4-4) Instruction in laboratory operations for the analysis of environmental contaminants according to current federal, state and local standards. Prerequisite: College-level or Applied General Chemistry I.

CTEC 2486 Internship - Chemical Technology/Technician (0-20-4) A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

CTEC 2487 Internship - Chemical Technology/Technician (0-20-4) A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

CVOP

CVOP 1245 Commercial Drivers License Overview (2-0-2) Overview of the State of Texas Class A Commercial Drivers License written test and preparation for mastery of the Commercial Drivers License written examination.

CVOP 2205 Fundamental Driving Skills (0-5-2) Operation of a tractor-trailer combination. Emphasis on the safe maneuvering and control of the tractor-trailer in numerous traffic situations and sharing the highway with other vehicles.

CVOP 2209 Semi Tractor-Trailer Operator Driving Skills (2-0-2) Operation of a tractor-trailer combination in city and highway conditions including control and maneuvering of the vehicle through various traffic situations with numerous tractor-trailer combinations.

CVOP 2233 Advanced Driving Skills I (1-2-2) Operation of a tractor-trailer combination in city and highway conditions. Includes controlling and maneuvering the vehicle through various traffic situations in different conditions with numerous tractor-trailer combinations.

CVOP 2337 Advanced Driving Skills II (2-3-3) Continuation of tractor-trailer operation in city and highway conditions. Exploration and practical applications of space management techniques, improved methods for control in difficult traffic situations, and effective operation in various conditions.

DEMR

DEMR 1317 Basic Brake Systems (2-4-3) An introduction to the basic principles of brake systems of diesel powered equipment. Emphasis on maintenance, repairs, and troubleshooting. Course also covers design, construction and use of these systems. Prerequisites: READ 0050, WRIT 0050 DMTH 0050.

DEMR 1321 Power Train I (2-4-3) Fundamental repair and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair.

DEMR 1323 Heating, Ventilation and Air Conditioning (HVAC) Troubleshooting and Repair (2-4-3) Introduction to heating, ventilation, and air conditioning theory, testing, and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools, and repairs. Students learn safe refrigerant handling procedures and EPA-compliant recovery methods. Prerequisites: READ 0050 WRIT 0050 DMTH 0050.

DEMR 1330 Steering and Suspension I (2-4) A study of design, function, maintenance, and repair of steering and suspension systems. Emphasis on troubleshooting and repair of failed components.

DEMR 1335 Automatic Power Shift and Hydrostatic Transmissions I (2-4-3) A study of the operation, maintenance, and repair of automatic power shift hydrostatic transmissions.

DEMR 1405 Basic Electrical Systems (2-4-4) Basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, and batteries. Instruction covers basic electrical fundamentals, safety, the proper use of test equipment, as well as testing/diagnosis of lighting and accessory equipment, starting and charging systems. Prerequisites: READ 0050 WRIT 0050 DMTH 0050.

DEMR 1435 Automatic Power Shift and Hydrostatic Transmissions I (2-6-4) A study of the operation, maintenance, and repair of automatic power shift hydrostatic transmissions.

DEMR 1449 Diesel Engine II (2-7-4) An in-depth coverage of disassembly, repair, identification, evaluation, and reassembly of diesel engines. Prerequisites: READ 0050, WRIT 0050 DMTH 0050.

DEMR 2334 Advanced Diesel Tune-Up and Troubleshooting (2-4-3) Advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach. Presents an organized, systematic approach to identifying and
solving non-start conditions and tuning for optimum performance. Prerequisites: DEMR 1449.

DEMR 2335 Advanced Hydraulics (2-4-3) Advanced study of hydraulic systems and components including diagnostics and testing of hydraulic systems. Introduces organized, commonsense trouble-shooting techniques for electronic and computerized controls. Prerequisites: DEMR 1316 or HYDR 1305.

DEMR 2348 Failure Analysis (2-4-3) An advanced course designed for analysis of typical part failures on equipment. Teaches identification of the contributing causes and conditions that lead to these failures. Prerequisites: DEMR 1317, DEMR 1321, DEMR 1449.

DEMR 2432 Electronic Controls (2-4-4) Advanced skills in diagnostic and programming techniques of electronic control systems. Teaches a systematic approach to electronic diagnostics. Prerequisite: DEMR 1405.

DFTG

DFTG 1305 Technical Drafting (2-4-3) Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. Prerequisite: DMTH 0050, READ 0100, WRIT 0100. Corequisite: DFTG 1309.

DFTG 1309 Basic Computer Aided Drafting (2-4-3) An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems and plot/print to scale. Prerequisites: DMTH 0050, READ 0100, WRIT 0100.

DFTG 1317 Architectural Drafting-Residential (2-4-3) Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. Prerequisite: DFTG 1309.

DFTG 1325 Blueprint Reading and Sketching (2-4-3) An introduction to reading and interpreting “working drawings” for manufactured products and associated tooling; use sketching techniques to create pictorial and multiple-view drawings. Prerequisites: DMTH 0050.

DFTG 1329 Electro-Mechanical Drafting (2-4-3) A basic course including layout and design of electro-mechanical equipment from engineering notes and sketches. Emphasis on drawing of electronic enclosures, interior hardware, exterior enclosures, detailed and assembly drawings with a parts list, and flat pattern layouts. Prerequisite: DFTG 1309.

DFTG 1333 Mechanical Drafting (2-4-3) Detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, pictorial drawings, including bill of materials. Prerequisite: DFTG 1309.

DFTG 2312 Technical Illustration and Presentation (2-2-3) Pictorial drawing including isometrics, obliques, perspectives, charts, and graphs. Emphasis on rendering and using different media. This is a Capstone Course. Prerequisite: Permission from the Program Chair.

DFTG 2319 Intermediate Computer Aided Drafting (2-4-3) A continuation of practices and techniques used in basic computer-aided drafting emphasizing advanced dimensioning techniques, the development and use of prototype drawings, construction of pictorial drawings, construction of 3 dimensional drawings, interfacing 2d and 3d environments and extracting data. Prerequisite: DFTG 1309.

DFTG 2332 Advanced Computer Aided Drafting (2-4-3) Use of advanced techniques, including the use of a customized system and the principles of data manipulation for drawing production enhancement. Presentation of advanced drawing applications, such as three-dimensional modeling and linking graphic entities to external non-graphic data. Prerequisite: DFTG 1309 DFTG 1305.

DFTG 2340 Solid Modeling/Design (2-4-3) A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Prerequisite: DFTG 1305 DFTG 1309 DMTH 0100.

DFTG 2350 Geometric Dimensioning and Tolerancing (2-4-3) Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings. Prerequisite: DFTG 1309, DFTG 1305.

DFTG 2386 CAD Internship (0-9-3) A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

DFTG 2430 Civil Drafting (2-4-4) An in-depth study of drafting methods and principles used in civil engineering. Prerequisite: DFTG 1309, DFTG 1305.

EECT

EECT 1300 Technical Customer Service (2-2-3) General principles of customer service within a technical environment. Topics include internal/external customer relationships, time-management, best practices, and verbal and non-verbal communications skills. Prerequisite: READ 0200, WRIT 0200.
ECT 1303 Introduction to Telecommunications (2-4-3) An overview of the telecommunications industry. Topics include the history of the telecommunications industry, terminology, rules and regulations, and industry standards and protocols. Prerequisites: DMTH 0200, READ 0200, WRIT 0200.

ECT 1307 Cogntgent Technologies (2-4-3) A study of telecommunications convergence technologies including telephone, LAN, WAN, wireless, voice, video, and internet protocol.

ELPT

ELPT 1319 Fundamentals of Electricity I (2-2-3) An introduction to basic direct current (DC) theory including electron theory and direct current applications. Prerequisite: ELPT 1321.

ELPT 1311 Basic Electrical Theory (1-7-3) Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current. Emphasis will be placed on electrical symbols, schematics, and the operation of multimeters. Prerequisites: DMTH 0100, READ 0100, WRIT 0100.

ELPT 1320 Fundamentals of Electricity II (2-3-3) Introduces alternating current (AC). Includes AC voltage, frequency, mechanical and electrical degrees, waveforms, resistors, capacitors, and inductors. Prerequisite: ELPT 1311.


ELPT 1341 Motor Control (2-4-3) Operating principles of solid-state controls along with their practical applications. Topics include braking, jogging, plugging, safety interlocks, wiring and schematic diagram interpretations. Prerequisite: ELPT 1311.

ELPT 1345 Commercial Wiring (2-4-3) Instruction in commercial wiring methods. The theory and basic principles pertaining to the science and art of electrical wiring are covered. The terms, electrical symbols, names of devices, methods and materials used in electrical installations, and problems encountered in electrical construction work are also presented. Prerequisite: CETT 1303, ELPT 1311.

ELPT 1351 Electrical Machines (2-4-3) Direct current (DC) motors, single-phase and polyphase alternating current (AC) motors, generators, and alternators. Emphasis on construction, characteristics, efficiencies, starting, and speed control. Prerequisites: ELPT 1341.

ELPT 1380 Cooperative Education (1-19-3) Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

ELPT 1381 Cooperative Education (1-19-3) Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

ELPT 1319 Programmable Logic Controllers 1 (1-7-3) Fundamental concepts of programmable logic controllers, principles of operation, numbering systems as applied to electrical controls. Prerequisite: ELPT 1311.

ELPT 2311 AC/DC Drives (2-4-3) Installation and maintenance of alternating current (AC) and direct current (DC) variable speed drives with emphasis on application, operating characteristics, and troubleshooting techniques. Prerequisite: ELPT 1341.

ELPT 2323 Transformers (2-4-3) A Study of Transformer Types, Construction. Prerequisite: ELPT 1321.

ELPT 2339 Electrical Power Distribution (2-3-3) Design, operation, and technical details of modern power distribution systems including generating equipment, transmission lines, plant distribution, and protective devices. Includes calculations of fault current, system load analysis, rates, and power economics. Prerequisite: LNKW 2322.

ELPT 2380 Cooperative Education (1-19-3) Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

EPCT

EPCT 1305 Environmental Regulations Overview (3-0-3) An introduction to the history of the environmental movement, including basic requirements for compliance with environmental health and safety regulations. Also to include management of hazardous materials. Prerequisites: READ 0050, WRIT 0050.

EPCT 1313 Contingency Planning (2-3-3) An introduction to the development of an emergency response contingency plan for a facility or community. Emphasis on analyzing the hazards, writing and implementing the contingency plans, and evaluating the effectiveness of the contingency plan. READ 0050 WRIT 0050.

EPCT 1341 Principles of Industrial Hygiene (2-4-3) Basic concepts in threshold limits, dose response, and general recognition of occupational hazards, including sampling.
statistics, calibration, and equipment use. A study of the control of occupational hazards; and sample collection and evaluation methods. Prerequisites: READ 0050, WRIT 0050 DMTH 0050.

EPCT 2331 Industrial Hygiene Applications (2-3-3) A study of the industrial environment and its relation to worker’s health. This course provides training in anticipation, recognition, evaluation, and controlling health hazards - particularly chemical, physical, biological, and ergonomic factors existing in the workplace and having injurious effects on workers. The course also introduces training in instrumentation used in monitoring and measuring health hazards in the workplace and covers current issues in industrial hygiene. Prerequisite: EPCT 1341.

HART

HART 1307 Refrigeration Principles (2-4-3) An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety. Prerequisite: ELPT 1311 or equivalent.

HEMR

HEMR 1304 Natural Gas Compression (2-4-3) An introductory course in the principles of the operation of gas compressors and natural gas engines.

HEMR 1401 Tracks and Undercarriages (2-4-4) Covers operation and maintenance of final drives, track systems, and undercarriages used on track and wheel type equipment. Students learn maintenance and inspection procedures on both tracked and wheeled equipment. Prerequisites: READ 0050, WRIT 0050 DMTH 0050.

HRPO

HRPO 2307 Organizational Behavior (2-2-3) The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. Prerequisite: READ 0100.

HYDR

HYDR 1305 Basic Hydraulics (2-4-3) Fundamentals of hydraulics including types of hydraulic pumps, cylinders, valves, motors, and related systems. Introduction to hydraulic schematic symbols as related to components. Prerequisites: DMTH 0100, READ 0100, WRIT 0100.

HYDR 1345 Hydraulics and Pneumatics (2-4-3) Fundamentals of hydraulics and types of hydraulic pumps, cylinders, valves, motors, and related systems including operations, maintenance, and system analysis. Prerequisite: HYDR 1305.

IEIR

IEIR 1304 Alternating Current Circuits for Industrial Applications (2-4-3) Fundamentals of alternating current including series and parallel circuits, phasors, and capacitive and inductive networks. Discussion of circuit analysis and measurement. Prerequisite: ELPT 1311.

IMED

IMED 1301 Introduction to Multimedia (2-4-3) A survey of the theories, elements, and hardware/software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, web page development, and interactive presentations. Emphasis on conceptualizing and producing effective multimedia presentations. Prerequisites: DMTH 0100, READ 0200, WRIT 0100.

IMED 1305 Multimedia Courseware Development I (2-4-3) Instruction in courseware development. Topics include interactivity, branching, navigation, evaluation techniques and interface information design using industry standard authoring software. Prerequisites: DMTH 0100, READ 0200, WRIT 0100 ARTC 1302.

IMED 1316 Web Design I (2-4-3) Instruction in web page design and related graphic design includes including mark-up languages, web sites, and browsers. Prerequisites: DMTH 0100, READ 0200, WRIT 0100.

IMED 1345 Interactive Multimedia I (2-4-3) Exploration of the use of graphics and sound to create interactive multimedia animations using industry standard authoring software. Prerequisites: DMTH 0100, READ 0200, WRIT 0100 IMED 1301.

IMED 2305 Multimedia Courseware Development II (2-4-3) In-depth coverage of programming/scripting using an authoring system with emphasis on advanced development of courseware products. Prerequisite: IMED 1305.

IMED 2311 Portfolio Development (2-4-3) Emphasis on preparation and enhancement of portfolio to meet professional standards, professional organizations, presentation skills, and job-seeking techniques.

IMED 2313 Project Analysis and Design (2-4-3) Introduction to the planning process for multimedia or web including costing, preparation, production legal issues, and guidelines for pre-production preparation and creation of a comprehensive design document including target audience analysis, purpose and goals, objectives content outline, flow chart, and storyboard. Emphasis on content design and production management. Prerequisite: APPROVAL OF ADVISOR.
IMED 2315 Web Design II (2-4-3) A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues. Prerequisite: IMED 1316.

IMED 2349 Internet Communications (2-4-3) Advanced seminar in web server design and maintenance. Topics include scripting, web site planning, testing, security, production and marketing. Prerequisite: APPROVAL OF ADVISOR.

INCR

INCR 1344 Instrumentation Repair (2-4-3) Analysis of the procedures necessary to isolate faults in microcomputer or programmable logic controller (PLC) based process control systems including symptom analysis, schematic and print reading, and proper use of test equipment to isolate failures to the repairable unit. Prerequisite: ELPT 2319, INTC 1341 or INTC 1355.

INEW

INEW 2334 advanced Web Programming (2-4-3) Programming for web authoring. Includes industry-standard languages and data stores. Use language(s) or other interactive elements to design, code and implement a dynamic website; demonstrates connectivity between data store and website.

INMT

INMT 1305 Introduction to Industrial Maintenance (2-4-3) Basic mechanical skill and repair techniques common to most fields of industrial maintenance. Precision measuring instruments will be included. General safety rules common in industry including lock-out/tag-out will also be studied. Emphasis will be placed on industrial policies and procedures. Also covered will be pipingfitting practices, standards, specifications, the use of various materials/fittings and material takeout/makeup process. Prerequisites: DMTH 0100, READ 0100, WRIT 0100.

INMT 1311 Computer Integrated Manufacturing (2-4-3) A study of the principles and application of computer integrated manufacturing. Employs all aspects of a system including but not limited to integration of material handling, manufacturing, and computer hardware and programming. Prerequisite: DMTH 0050, READ 0050 WRIT 0050.

INMT 1380 Cooperative Education – Industrial/Manufacturing Technology/Technician (1-19-3) Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Permission from the program chair.

INMT 1381 Cooperative Education – Industrial/Manufacturing Technology/Technician (1-19-3) Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Permission from the program chair.

INMT 1580 Cooperative Education – Industrial/Manufacturing Technology/ Technician (1-39-5) Career-related activities encountered in the student’s area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Permission from the program chair.

INMT 2301 Machinery Installation (2-4-3) Students utilize skills acquired in previous studies. Machinery foundation, locations, installation, and alignment activities are practiced and tested. Emphasis is on the various methods of shaft alignment including laser shaft alignment. Also included in the course will be weight estimation, rigging devices, chains, straps, binders, fork truck safety and associated equipment with emphasis on safe rigging practices. Prerequisite: INMT 1305.

INMT 2303 Pumps, Compressors and Mechanical Drives (2-4-3) A study of the theory and operation of various types of pumps and compressors. Topics include mechanical power transmission systems including gears, V-belts, and chain drives. Prerequisites: DMTH 0100, READ 0100, WRIT 0100.

INMT 2345 Industrial Troubleshooting (2-4-3) An advanced study of the techniques used in troubleshooting various types of industrial equipment to include mechanical, electrical, hydraulic, and pneumatic systems and their control devices. Emphasis will be placed on the use of schematics and diagrams in conjunction with proper troubleshooting procedures. Prerequisites: ELPT 1341, HYDR 1305.

INTC

INTC 1341 Principles of Automatic Control (2-4-3) A study of the theory of basic measurements, automatic control systems and design, closed loop systems, recorders, controllers, feedback, control modes, and control configurations. Prerequisites: DMTH 0200, READ 0200, WRIT 0200.

INTC 1355 Unit Operations (2-4-3) An in-depth study of industrial processes including fluid flow and material transport, distillation, extraction, and automatic control requirements of...
these processes. Instruction in control system design and control loop adjustments and analysis. Prerequisites: INTC 1341, INTC 1356.

INTC 1356 Instrument Calibration (2-4-3) A study of techniques for calibrating electronic and pneumatic transmitters, controllers, recorders, valves, and valve positioners including tear down, assembly, alignment, and calibration of equipment. Prerequisite: INTC 1341 or INTC 1355.

INTC 1380 Cooperative Education - Instrumentation Technology/Technician (1-19-3) Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: Permission from the program chair, DMTH 0200, READ 0200, WRIT 0200.

INTC 1381 Cooperative Education - Instrumentation Technology/Technician (1-19-3) Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: Permission from the program chair, DMTH 0200, READ 0200, WRIT 0200.

INTC 2336 Distributed Control (2-4-3) An overview of distributed control systems including configuration of programmable logic controllers, smart transmitters, and field communicators. Functions of digital systems in a process control environment. Prerequisite: ELPT 2319

INTC 2336 Distributed Control and Programmable Logic (2-4-3) Overview of distributed control systems including configuration of programmable logic controllers, smart transmitters, and field communicators. Functions of digital systems in a process control environment. Prerequisite: ELPT 2319, INTC 1355.

INTN 1308 Implementing and Supporting Client Operating Systems (2-4-3) Skills development in the management of client as desktop operating systems.

INTN 1325 Fundamentals of Networking/Technologies (2-4-3) Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Prerequisite: EECT 1303.

INTN 1353 Supporting Network Server Infrastructure (2-4-3) Skills development in installing, configuring, managing, and supporting a network infrastructure.

INTN 2305 Network Administration (2-4-3) Topics include network components, user accounts and groups, network file systems, file system security, and network printing.

INTN 2321 Routers (2-4-3) Router configuration for local area networks and wide area networks. Includes Internet Protocol (IP) addressing techniques and intermediate routing protocols. Prerequisite: ITNW 1325, EECT 1303.

INTN 2321 Networking with TCP/IP (2-4-3) Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems. Prerequisite: ITNW 1325.

INTN 2352 Administering SQL Server (2-4-3) Administering SQL Server is a skills development course in the installation, configuration, administration, and troubleshooting SQL server client/server database management system version. Prerequisite: ITSW 2337 or ITSE 1331.

ITSC

ITSC 1305 Introduction to PC Operating Systems (2-4-3) A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Prerequisite: DMTH 0200, READ 0200, WRIT 0200.

ITSC 1309 Integrated Software Applications I (2-4-3) Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets,
databases, and/or presentation media software. Prerequisite: DMTH 0100, READ 0100, WRIT 0100.

ITSC 1316 Linux Installation and Configuration (2-4-3) Open-source Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application development. Emphasizes hands-on setup, administration, and management of Linux. Also covers maintaining and securing reliable Linux systems.

ITSC 1347 UNIX System Administration II (2-4-3) Provides students with the necessary skills to administer UNIX workstations in a network environment. System security features will be presented.

ITSC 1358 UNIX System Administration I Intermediate (2-4-3) Provide new system administrators the basics of administering UNIX workstations. Students will perform basic system administration tasks, such as installing a standalone system, adding users, backing up and restoring file systems, and adding new printer support. Emphasis on the procedures needed to perform these system administration tasks. Introduces the concept of the system and disk management.

ITSC 2321 Integrated Software Applications II (2-4-3) Continued study of computer applications from business productivity software suites. Instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Prerequisite: ITSC 1309.

ITSC 2337 UNIX Operating System II (2-4-3) Continued study of the UNIX operating system commands. Includes advanced additional scripting topics such as CGI or PERL. Prerequisite: ITSC 1307, ITSE 1329.

ITSC 2370 Final Project: Systems Administration (1-6-3) Students will design and implement a systems administration plan for specified parameters utilizing knowledge and skill sets learned in the course of instruction. The students will be given a set of desired administrative outcomes and will implement current or impending technologies to obtain these outcomes. Prerequisites: ITNW 1325, CPMT 1345.

ITSC 2487 Internship - Computer and Information Sciences, General (0-20-4) A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: Permission from the program chair.

ITSE

ITSE 1301 Web Design Tools (2-4-3) Designing and publishing Web documents according to World Wide Web consortium W3C) Standards. Includes graphic design issues and exploration of tools available for creating and editing Web documents. Prerequisite: ITSC 1309 or Approval from advisor.

ITSE 1302 Computer Programming (2-4-3) Introduction to computer programming with emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Prerequisite: ITSC 1309, ITSE 1329.

ITSE 1306 PHP Programming (2-4-3) Introduction to PHP including the design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Prerequisite: IMED 2315 ITSW 2337.

ITSE 1307 Introduction to C++ Programming (2-4-3) Introduction to computer programming using C++. Emphasis on the fundamentals of structured design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Prerequisite: ITSE 1302.

ITSE 1329 Programming Logic and Design (2-2-3) A disciplined approach to problem-solving with structured techniques and representation of algorithms using appropriate design tools. Discussion of methods for testing, evaluation, and documentation. Prerequisite: DMTH 0050, READ 0050.

ITSE 1330 Introduction to C# Programming (2-4-3) A study of C# syntax including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. Prerequisite: ITSE 1329.

ITSE 1332 Introduction of Visual Basic.NET Programming (2-4-3) A study of Visual Basic.NET (VB.NET) syntax including: data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. Prerequisites: ITSE 1302 OR ITSE 1329.

ITSE 2304 Visual Basic.NET Database Development with ADO.NET (2-4-3) Visual Basic.NET applications to access data from database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET. Prerequisites: ITSE 1332.

ITSE 2321 Object-Oriented Programming (2-4-3) Introduction to object-oriented programming. Emphasis on the fundamentals of structured design with classes, including development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects. Prerequisite: ITSE 1331.
ITSW

ITSW 1307 Introduction to Database (2-4-3) Introduction to database theory and the practical applications of a database. Prerequisites: ITSC 1309.

ITSW 2337 Advanced Database (2-4-3) Designed to provide an understanding of advanced functionality of databases. Prerequisite: ITSW 1307.

ITSY

ITSY 1342 Information Technology Security (2-4-3) Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Prerequisites: ITNW 1325.

LAWT

LAWT 1201 Copyright and Ethical Issues (2-0-2) Introduction to basic copyright law and related ethical issues as they apply to creation and use of copyrighted material. Emphasis on practical application of copyright law through case studies. Prerequisite: READ 0200, WRIT 0200.

LAWT 1301 Copyright and Ethical Issues (3-0-3) Introduction to basic copyright law and related ethical issues as they apply to creation and use of copyrighted material. Emphasis on practical application of copyright law through case studies. READ 0200, WRIT 0200.

LGLA

LGLA 2305 Interviewing and Investigating (2-2-3) This course is a study of principles, methods, and investigative techniques utilized to locate, gather, document, and manage information. Emphasis on developing interviewing and investigative skills to prepare the paralegal to communicate effectively while recognizing ethical problems. Prerequisites: DMTH 0100, READ 0200, WRIT 0200.

LNWK

LNWK 1301 Orientation and Line Skill Fundamentals (3-0-3) Examination of utility company operations. Topics include company structure, safety and distribution standards handbook, lineman's tools, vocabulary, and work procedures. Discussion of basic electrical systems including the history of power generation and distribution with emphasis on generating plants and substations. Prerequisite: DMTH 0100 READ 0100 WRIT 0100.

LNWK 1311 Climbing Skills (2-3-3) Theory and application of pole climbing. Includes safety, climbing techniques, tool inspection, poles inspection, personal protective equipment, and fall protection. Prerequisite: DMTH 0100 READ 0100 WRIT 0100.

LNWK 2322 Distribution Line Construction (2-3-3) Study of electric distribution line construction. Includes reading staking sheets and framing specifications, tailboard discussions, pole framing and setting, installing conductors, transformers and other line equipment, and OSHA and NESC regulations. Prerequisite: LNWK 1311.

MCHN

MCHN 1320 Precision Tools and Measurement (2-2-3) An introduction to the modern science of dimensional metrology. Emphasis on the identification, selection, and application of various types of precision instruments associated with the machining trade. Practice of basic layout and piece part measurements while using standard measuring tools. Prerequisites: DMTH 0050 or MCHN 1343, READ 0050, WRIT 0050.


MCHN 1338 Basic Machine Shop I (1-6-3) An introductory course that assists the student in understanding the machinist occupation in industry. The student begins by using basic machine tools such as the lathe, milling machine, drill press, power saw, and bench grinder. Machine terminology, theory, math, part, layout, and bench work using common measuring tools is included. Emphasis is placed on shop safety, housekeeping, and preventative maintenance. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

MCHN 1343 Machine Shop Mathematics (3-0-3) Designed to prepare the student with technical, applied mathematics that will be necessary in future machine shop-related courses. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

MCHN 1380 Cooperative Education – Machine Tool Technology/Machinist (1-19-3) Career-related activities encountered in the student’s area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: Permission from the program chair.

MCHN 1452 Intermediate Machining I (2-6-4) Operation of drills, milling machines, lathes, and power saws. Introduction to precision measuring techniques. Prerequisite: MCHN 1338.
MCHN 2403 Fundamentals of CNC (2-6-4) An introduction to G and M codes (RS274-D) necessary to program Computer Numerical Controlled (CNC) machines.

MCHN 2431 Operation of CNC Turning Centers (2-6-4) A continuation of Fundamentals of CNC Machine Controls with an emphasis on turning centers. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

MCHN 2434 Operation of CNC Machining Centers (2-6-4) A continuation of Fundamentals of CNC Machine Controls with an emphasis on machining centers. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

MCHN 2435 Advanced CNC Machining (2-6-4) The study of advanced CNC operation with an emphasis on programming and operations of machining and turning centers. Prerequisite: MCHN 2434 MCHN 2431.

OSHT

OSHT 1305 OSHA Regulations – Construction Industry (2-3-3) A study of Occupational Safety and Health Administration (OSHA) regulations pertinent to the construction industry. Prerequisites: READ 0050, WRIT 0050.

OSHT 1307 Construction Site Safety and Health (2-2-3) Construction accident prevention; interpretation of OSHA regulations; general safety requirements; occupational health and environmental controls; fire protection and prevention; signs and other barricades; proper hand-tool usage; welding and cutting; electrical hazards; ladders, scaffolding, floors, and stairways; cranes, derricks, hoists, elevators, and conveyors; motor vehicles and mechanized equipment; excavation, trenching, and shoring demolition; and blasting and the use of explosives. Prerequisites: READ 0050, WRIT 0050.

OSHT 1313 Accident Prevention, Inspection, and Investigation (2-3-3) Principles and practices providing a basis for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, inspection techniques, and accident investigation analysis. Prerequisites: DMTH 0050 READ 0050.

OSHT 1316 Material Handling (2-3-3) Proper methods for material handling and storage including safety practices, proper equipment usage, engineering controls, personal protective equipment, and motor fleet safety. Prerequisite: READ 0050, WRIT 0050.

OSHT 1321 Fire Protection Systems (2-2-3) Study of fire protection systems and their applications with emphasis on the National Fire Protection Association codes. Prerequisites: READ 0050, WRIT 0050.

OSHT 1391 Special Topics in Occupational Safety and Health Technology/Technician (2-4-3) Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Prerequisite: Permission from the program chair.

OSHT 2309 Safety Program Management (3-0-3) Examine the major safety management issues that affect the workplace including safety awareness, loss control, regulatory issues, and human behavior modification. Prerequisite: READ 0100 WRIT 0100 MATH 0100.

OSHT 2310 Principles of Safety Engineering (2-3-3) Methods to predict, eliminate, or reduce unsafe conditions at the design and construction stage utilizing engineering controls. Includes methods of analysis, prioritization, and implementation of control measures for potentially hazardous situations in the workplace. DMTH 0100 READ 0100 WRIT 0100.

OSHT 2320 Safety Training Presentation Techniques (2-3-3) Principles of developing and presenting effective industrial/business training. Emphasis on instructor qualifications and responsibilities, principles teaching including use of teaching aids and presentation skills. READ 0100, WRIT 0100.

OSHT 2388 Internship - Occupational Safety and Health Technology/Technician (0-10-3) A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: Permission from the program chair.

OSHT 2401 OSHA Regulations - General Industry (3-3-4) A study of Occupational Safety and Health Administration (OSHA) regulations pertinent to general industry. Prerequisites: READ 0050, WRIT 0050.

POFI

POFI 1291- Special Topics in Information Processing/Data Entry Technician (1-2-2) Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

POFI 1301 Computer Applications I (2-3-3) Overview of computer office applications including current terminology and technology. Introduction to computer hardware, software applications, and procedures.
POFI 2331 Desktop Publishing (2-4-3) In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications. Define desktop publishing terminology, manipulate test and graphics to create a balanced and focused layout; and create fliers and multiple page documents.

POFT

POFT 1309 Administrative Office Procedures I (2-2-3) Study of current office procedures, duties, and responsibilities applicable to an office environment. Prerequisite: READ 0100, WRIT 0100.

POFT 1329 Beginning Keyboarding (2-2-3) Skill Development in the operation of keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. Prerequisite: READ 0100, WRIT 0100.

PSYT

PSYT 1313 Psychology of Personal Adjustment (2-2-3) Development of personal, social, and work adjustment skills. Prerequisite: DMTH 0100, READ 0100, WRIT 0100.

PTAC

PTAC 1302 Introduction to Process Technology (2-2-3) Introduction to chemical and refinery plant operations. Topics include process technician duties, responsibilities and expectations; plant organizations; plant process and utility systems; and the physical and mental requirements of the process technician. Prerequisites: DMTH 0200, READ 0200, WRIT 0200.

PTAC 1308 Safety, Health, and Environment I (3-0-3) Development of knowledge and skills to reinforce the attitudes and behaviors required for safe and environmentally sound work habits. Emphasis on safety, health, and environmental issues in the performance of all job tasks and regulatory compliance issues. Prerequisite: DMTH 0200, READ 0200 WRIT 0200.

PTAC 1332 Process Instrumentation I (2-4-3) Study of instruments and instrument systems used in the chemical processing industry including terminology, primary variables, symbology, control loops, and basic troubleshooting. Prerequisites: DMTH 0200, READ 0200 WRIT 0200.

PTAC 1410 Process Technology I – Equipment (3-3-4) Instruction in the use of common process equipment. Prerequisites: DMTH 0200, READ 0200, WRIT 0200.

PTAC 2314 Principles of Quality (2-2-3) Study of the background and application of quality concepts. Topics include team skills, quality tools, and economics and continuous improvement. Quality is one of the eight core courses in the Process Technology Alliance Curriculum (PTAC), sponsored by the Process Technology Alliance. Quality introduces students to many process industry-related quality concepts including operating consistency, continuous improvement, plant economics, team skills and statistical process control (SPC) and 6 Sigma. Prerequisite: DMTH 0200, READ 0200 WRIT 0200.

PTAC 2336 Process Instrumentation II (2-3-3) Continued study of coverage of the varied instruments and instrument systems used in the chemical processing industry including terminology, primary variables, symbology, control loops, and basic troubleshooting. Prerequisite: PTAC 1332.


PTAC 2420 Process Technology II - Systems (3-3-4) Study of the interrelation of process equipment and process systems including related scientific principles. Prerequisites: PTAC 1410.

PTAC 2438 Process Technology III - Operations (3-3-4) This course combines systems into operational processes with emphasis on operations under various conditions. Topics include typical duties of an operator. Prerequisite: PTAC 1410.

PTAC 2446 Process Troubleshooting (3-3-4) Instruction in the different types of troubleshooting techniques, procedures, and methods used to solve problems. Topics include application of data collection and analysis, cause-effect relationships, and reasoning. Prerequisite: PTAC 1410.

PTRT

PTRT 1301 Overview of Petroleum Industry (3-0-3) An overview of the entire petroleum industry. Purposes and proper procedures in a variety of different petroleum technologies: exploration, drilling, production, transportation, marketing, and refining. Prerequisite: DMTH 0200, READ 0200 WRIT 0200.

PTRT 1317 Natural Gas Processing I (3-0-3) An overview of natural gas processing operations. Fundamentals of gas processing, the nature of heat and how it implements the process, gas plant processing equipment, and procedures from raw material to the refined product. Prerequisite: DMTH 0200, READ 0200, WRIT 0200.
QCTC

QCTC 1301 Total Quality Management (2-2-3) The study of integrating work processes using team participation through employee empowerment and teamwork emphasizing the philosophy of customer service and satisfaction. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

QCTC 1303 Quality Control (2-3-3) Information on quality control principles and applications. Designed to introduce the student to the quality control profession. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

QCTC 1341 Statistical Process Control (2-3-3) Components of statistics including techniques of collection, presentation, analysis, and interpretation of numerical data as applied to statistical control. Stresses application of correlation methods, analysis of variance, dispersion, sampling quality control, reliability, mathematical models, and programming. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

QCTC 1343 Quality Assurance (2-3-3) Principles and applications designed to introduce quality assurance. Prerequisite: READ 0050 WRIT 0050 DMTH 0050.

RBTC

RBTC 1305 Robotic Fundamentals (2-4-3) An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic manufacturing systems. Prerequisite: READ 0050 WRIT 0050 DMTH 0050.

SCIT

SCIT 1318 Industrial Physics (2-2-3) Motion, optics, electricity, magnetism, solid mechanics, and fluid mechanics relating to industrial applications. Includes properties of matter, heat, and thermodynamics.

SCIT 1414 Industrial Chemistry I (3-3-4) Study of chemistry emphasizing on industrial applications. Includes models for atomic and molecular structure and bonding, empirical approaches to thermochemistry and equilibrium, acids and bases, descriptive chemistry of the main group elements, and solutions. Prerequisite: DMTH 0200.

TECM

TECM 1301 Industrial Mathematics (2-2-3) Math skills applicable to industrial occupations. Includes fraction and decimal manipulation, measurement, scientific notation, percentage, and problem solving techniques for equations and ratio/proportion applications. Also includes using a scientific calculator. Prerequisite: DMTH 0200.

WLDG

WLDG 1307 Introduction to Welding Using Multiple Processes (2-4-3) An overview of the basic welding processes, including oxy-fuel welding and cutting, shielded metal arc (SMAW), gas metal arc (GMAW), and gas tungsten arc welding (GTAW). Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

WLDG 1337 Introduction to Metallurgy (2-3-3) A study of ferrous and non-ferrous metals from the ore to the finished product. Emphasis on metal alloys, heat treating, hard surfacing, welding techniques, forging foundry processes, and mechanical properties of metal including hardness, machinability, and ductility. Prerequisite: MCHN 1338.

WLDG 1340 AWS Level I Certification Review (2-4-3) A review of various welding processes, welding terminology, and welding technology curriculum in preparation for taking the American Welding Society Level One Certification written test. Demonstrate proficiency with AWS terminology; demonstrate ability to research AWS manuals. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

WLDG 1453 Intermediate Layout and Fabrication (3-4-4) A continuation of the introductory Layout and Fabrication course which covers design and production of shop layout and fabrication. Emphasis placed on symbols, blueprints, and written specifications. Identify auxiliary views and calculate steel and pipe dimensions using layout tools and construction templates. Identify fittings, weldments, templates, and tools; and interpret orthographic and isometric drawings. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

WLDG 1457 Intermediate Shielded Metal Arc Welding (SMAW) (3-4-4) A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Identify principles of arc welding; describe arc welding operations of fillet and groove joints; explain heat treatments of low alloy steels; and explain weld size and profile. Prepare test plates; perform fillet welds in the overhead position; perform air carbon arc weld removal; perform bevel groove welds with backing plates in various positions; and demonstrate use of tools and equipment. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.

WLDG 2413 Intermediate Welding Using Multiple Processes (3-4-4) Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: Oxy-Fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. Prerequisites: DMTH 0050, READ 0050, WRIT 0050.
WLDG 2406 Intermediate Pipe Welding (3-4-4) A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds will be 1G, 2G, 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices.

WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) (3-4-4) Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions. Prerequisite: WLDG 1457

WLDG 2447 Advanced Gas Metal Arc Welding (GMAW) (4-3-4) Advanced topics in GMAW welding, including welding in various positions and directions. Demonstrate proficiency in various welding positions on pipe; describe safety rules and equipment use; and describe the effects of welding parameters in GMAW. Weld various joint designs and diagnose welding problems and perform visual inspection Prerequisites: WLDG 1457
Faculty Directory

Alderman, Christi R., B.S.
Louisiana Tech University

Anderson, Robbie, B.S.
East Texas Baptist University

Blackmon, Donnie

Bozylnski, Andrew, M.S.
University of Southern California

Cantu, Mario H., B.S.
Illinois Benedictine College

Caraway, Shelly, M.A.
University of Texas at Tyler

Collier, Alesha, B.S.
LeTourneau University

Cunningham, Dawn, A.A.S.
Texas State Technical College

Curtis, William, A.A.S.
Tyler Junior College

Cuthbert, Robert, A.A.S.
Texas State Technical College

Davis, Augustus, M.S.
Indiana State University

De La Rosa, Aida, A.A.S.
Texas State Technical College

De La Rosa, Hector, A.A.S.
Texas State Technical College

Dillon, Donald W., A.S.
Kilgore College

Edgmon, Kathryn A., M.A.
University of Texas at Tyler

Elkins, Arlis, A.A.S.
Spokane Community College

Elliston, Melvin J., B.S.
Park College

Elmore, Trae, B.S.
Capella University

Erickson, Thomas, B.A.
St. Cloud State College

Guerro, Antonio

Hollingshead, Phyllis, B.S.
East Texas Baptist University

Hubbard, Rewa, A.A.S.
Richland College

Jones, Wilson A., B.S.
Louisiana Tech University

Kezerle, George, E.B.S.
Iowa State University

Lynn, Victoria, A.A.S.
Texas State Technical College

McDaniel, Gregory B., M.Ed.
Stephen F. Austin State University

McFarland, Richard L., M.S.
University of Texas at Tyler

Murrell, Brenda, A.A.S.
Northwestern State University of Louisiana

Murrell, William, A.A.S.
Texas State Technical College

Nixon, Daniel, A.A.S.
Texas State Technical College

O’Neill, Carolyn, A.A.S.
Texas State Technical College

Parks, Kenneth, A.A.S.
Texas State Technical College

Phillips, Michael W., B.S.
Texas A & M University

Roberts, Ruth A., M.Ed.
University of Texas at Tyler

Warren, Maurice E., B.S.
University of Texas at Tyler

Wilson, Jim, A.A.S.
Texas State Technical College

Yellott, Phillip, B.S.
University of Texas at Tyler
### Subject Index

#### A
- Admission Requirements, 8, 9, 10
- Advising, 25
- Articulation Agreements, 32
  - High School, 32
  - Tech Prep, 32

#### B
- Buildings and Facilities, 39

#### C
- Campus Security, 37
- Change of Major, 26
- Child Care Services, 38
- College Bookstore, 36
- Commencement, 27
- Commission on Colleges of the Southern Association of Colleges and Schools, 5
- COMPACT WITH TEXANS, 41
- Concurrent High School, 9-10
- Continuing Education, 8 - 10
- Counseling and Testing Services, 23
- Course Load, 23
- Curriculum, 28
  - Audited Courses, 31
  - Cooperative Education, 31
  - Day/Evening/Weekend, 31
  - Developmental Studies, 28
  - Distance Learning, 31
  - Dual Credit, 31
  - General Education, 28
  - Individualized Instruction, 31
  - Prerequisites and Co-requisites, 28
- Customer Service, 41
  - Formal Written Complaint, 42
  - Texas Higher Education Coordinating Board Complaint Procedure, 42

#### D
- Degree and Certificate Plans, 26
- Degree and Program Planning, 26
- Drops and Withdrawals, 32
- Dual Credit, 31

#### E
- Education Foundations, 40
- Emergency Tuition Loan, 14
- Enrollment, 32, 33, 34

#### F
- Financial Assistance, 17, 18, 19
  - Eligibility, 19
  - FAFSA, 17
  - Federal and State Work-Study Program (FWSP), 18
  - Federal Loans, 18
  - Federal Pell Grant, 18
  - Federal Stafford loans, 18
  - Federal Supplemental Educational Opportunity Grant (FSEOG), 18
  - Leveraging Educational Assistance Programs (LEAP, SLEAP), 18
  - Refunds, 16
  - Supplemental Educational Opportunity grants (SEOG, 18
  - Texas Public Education Grant (TPEG), 18
  - Texas Rehabilitation Commission Assistance, 18
  - Toward EXcellence, Access & Success (TExAS), 18
  - Trade Adjustment Assistance (TAA), 19
  - Veterans’ Benefits (G.I. Bill), 19
  - Workforce Investment Act (WIA), 19

#### G
- GED, General Education Development, 8
- General Information, 39
  - Buildings and Facilities, 39
  - Education Foundations, 40
  - Industry Advisory Committees, 40
  - Institutional Research, 40
  - Instructional Philosophy, 40
  - Release of Student Records, 40
- Governance and Accreditation, 4
- Grade Changes, 22
- Grade Point Average (GPA), 21
  - Cumulative, 21
  - Standards of Progress, 21
  - Term, 21
- Grade Reports, 22
- Grading Standards, 21
- Graduate Guarantee, 27
- Graduation, 27

#### H
- Housing, 15, 34
I
Industry Advisory Committees, 40
Installment Payment Plan, 14
Institutional Research, 40
Instructional Philosophy, 40
International Students, 9

J
James Connally Technical Institute, 4
Job Placement Services, 38

L
Library Resource Center (LRC), 36

M
Marshall, 3
Mission, 3

P
Program and Course Data, 44-78
Purpose, 3

R
Refunds, 16-17
Bookstore, 16
Housing, 17
Other Fees, 17
Registration, 32,
Release of Student Records, 40
Residency Status, 9

S
Schedule Changes, 32
Scholarships, 19
Scholastic Honors, 27
Board of Regents, 4
Scholastic Information, 21
Scholastic Integrity, 21, 22, 23, 33
Scholastic Standing, 27-33
Good Standing, 22
Scholastic Alert, 22
Scholastic Probation, 22
Scholastic Suspension, 22
Services for Students with Disabilities, 38

Student Activities, 35
Intramural and Recreational Sports, 35-36
Student Clubs and Organizations, 36
Student Government, 36
Student Publications, 36
Student Conduct and Discipline, 39
Student Health, 37
Bacterial Meningitis Notification, 37
Health Insurance, 37
Health Services, 37
HIV Policy and Procedures, 37
Insurance, 37
Student Participation, 32
Student Services, 34
Student Success, 37

T
Texas Success Initiative (TSI), 24-25
The TSTC System, 4
Transfer of Credit, 33
Tuition and Fees, 10, 11, 12,
Tuition Rebate, 10-11

V
Values, 4, 40, 41
Vision, 4, 40, 41

W
Waivers and Exemptions, 12, 13, 19
Withdrawal, 15
Workforce Training, 34
All campus offices can be reached at 903.935.1010 or toll free at 800.382.8782

WEBSITES
TSTC Marshall Website
www.marshall.tstc.edu
You can chat live with a recruiter!

MyTSTC and Web Advisor
http://my.tstc.edu/portal/main.html

College for Texans
http://www.collegefortexans.com

Texas Higher Education Assessment (THEA) Test
www.thea.nesinc.com

EMERGENCY CONTACT INFORMATION
TSTC Marshall Police Department Office
On Duty Officer phone numbers: 903.926.6801 (cell) or 903.923.3351 (office)

NOTICE OF CAMPUS CLOSURE
Notification for closing TSTC during inclement weather or other emergencies will be posted on Twitter and the TSTC website at www.marshall.tstc.edu and heard on:

<table>
<thead>
<tr>
<th>TV</th>
<th>Radio</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTBS Channel 3</td>
<td>KISS Country 93.7 FM</td>
</tr>
<tr>
<td>KTAL Channel 6</td>
<td>KRUE 94.3 FM</td>
</tr>
<tr>
<td>KLTV Channel 7</td>
<td>KVKI 96.5 FM</td>
</tr>
<tr>
<td>KSLA Channel 12</td>
<td>99X The Rock Station</td>
</tr>
<tr>
<td>KYTX Channel 19</td>
<td>KEEL News Radio 710 AM</td>
</tr>
<tr>
<td>KSUX-Fox 51</td>
<td>KWKH 1130 AM</td>
</tr>
</tbody>
</table>

Join our Online Communities
Twitter - http://twitter.com/tstcmarshall
MySpace - www.myspace.com/tstcmarshall
You Tube - http://www.youtube.com/tstc4u
Flickr - http://www.flickr.com/photos/tstcmarshall
Facebook - http://www.facebook.com/profile.php?...
Contact Us

Admissions & Records
Financial Aid
Housing
Placement
888.382.8782
903.935.1010

Texas State Technical Colleges

TSTC Harlingen
800.825.8784
956.364.4000

TSTC Marshall
888.382.8782
903.935.1010

TSTC Waco
800.792.8784
254.867.3371

TSTC West Texas
Abilene 325.672.7091
Breckenridge 254.559.7700
Brownwood 325.643.5987
Sweetwater 325.235.7300

TSTC
Texas State Technical College

2550 E End Blvd S
Marshall, Texas 75672
www.tstc.edu