



EAST
WILLIAMSON COUNTY

Higher Education
CENTER



Texas State
Technical College™

Information Guide



Welcome to TSTC!

1

Texas State Technical College



Elton E. Stuckly Jr., Ed.D.
President
Texas State Technical College
Waco

Texas State Technical College Waco is excited to be collaborating with Temple College to bring residents of East Williamson County new higher educational opportunities. TSTC Waco has been providing top-quality technical education for Texas and Texans for more than 45 years now. With 40,000-plus TSTC graduates employed throughout the nation, we are committed to providing you with a highly specialized and advanced technical education that can lead to great career opportunities.

Through the East Williamson County Higher Education Center (EWCHEC), TSTC will offer certificate programs in Welding, Air Conditioning, Culinary Arts, Industrial Systems Mechanic and Radio Communication Electronics in Hutto. In addition, a Welding Certificate program will be offered in Taylor. All of these courses are also available to high school students through dual credit.

Students will gain valuable hands-on experience in laboratories learning by doing, gaining a competitive edge when it comes to hiring time. In fact, TSTC students spend approximately 60 percent of their time working with the tools, technology and equipment they will use in their future careers.

Upon successful completion of the curriculum, you can look forward to outstanding career opportunities, as highly skilled technicians are in great demand! The number of jobs in the market these days requiring technical training or certifications is outpacing the number of people to fill them. Experts indicate that technical positions are the largest and fastest growing employment groups for the 21st Century.

TSTC is proud to be partnering with Temple College and all of the residents of East Williamson County in this exciting educational venture. I personally invite you to ask questions and find out more about opportunities available through EWCHEC.

A handwritten signature in black ink, reading "Elton E. Stuckly Jr." with a stylized flourish at the end.

Elton E. Stuckly Jr., Ed.D.
President, Texas State Technical College Waco



Technology focused. Career driven.

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 socio-economic backgrounds. Nearly 30,000 students are served each year through traditional degree programs, short-term continuing education and workforce 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.

Contact Us

EWCHEC-Hutto.....	512.846.1446
College Records.....	254.867.2361
Access & Learning Accommodations.....	254.867.3600
Financial Aid.....	254.867.4814

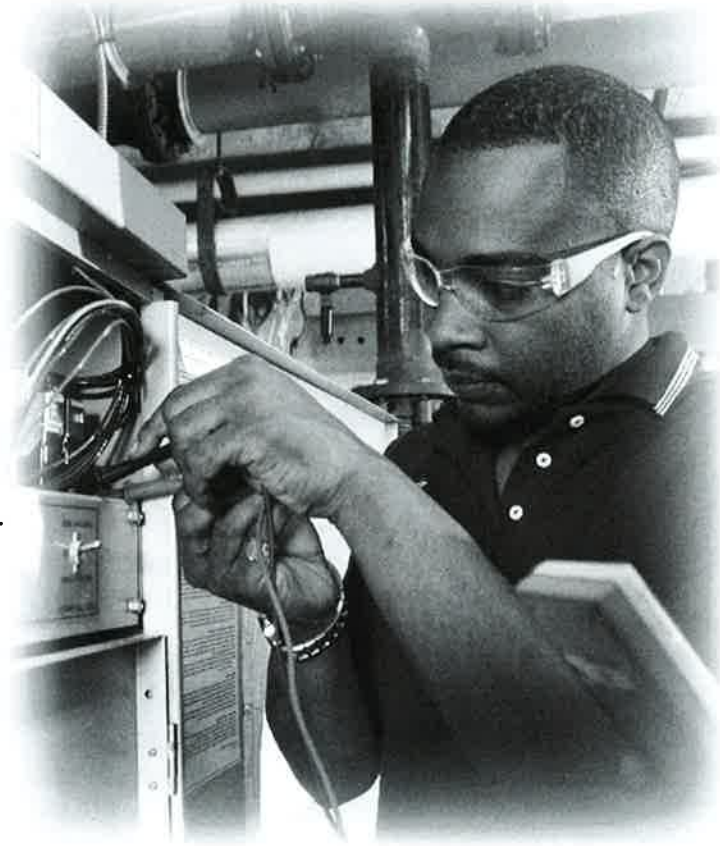
www.tstc.edu/higher



Considering the heat of Texas summers, it's no surprise this state is the nation's largest user of air-conditioning systems. And these days, the search is heating up for skilled A/C and heating technicians who understand the intricate operations of commercial and residential heating and air-conditioning equipment.

That's why the **Air Conditioning & Refrigeration Technology** program at Texas State Technical College offers a great opportunity for students to develop critical skills in one of the fastest-growing industries.

In the one-year Air Conditioning & Refrigeration Service curriculum, you can hone your skills for faster entry into the job market. Certificate program graduates may perform service, repair and maintain equipment or install equipment in new or existing buildings.



Air Conditioning Technician

Total Credits: 38

First Semester			Credits
TECH [^]	1100	Tech Success	
CTEX [^]	10XX	Tech Success Seminars (3 as assigned)	1
HART	1256	EPA Recovery Certification Preparation	2
HART	1301	Basic Electricity for HVAC	3
HART	1307	Refrigeration Principles	3
HART	1310	HVAC Shop Practices & Tools	3
Semester Total			11

[^]Institutional Credit Only

Second Semester			Credits
HART	1303	Air Conditioning Control Principles	3
HART	1341	Residential Air Conditioning	3
HART	1345	Gas and Electric Heating	3
HART	2342	Commercial Refrigeration	3
Semester Total			12

Third Semester			Credits
HART	2331	Advanced Electricity for HVAC	3
HART*	2336	Air Conditioning Troubleshooting	3
HART	2338	Air Conditioning Installation & Startup	3
HART	2343	Industrial Air Conditioning	3
HART	2349	Heat Pumps	3
Semester Total			15

Salaries in this field are good, and the more you learn the more you earn! According to the U.S. Bureau of Labor Statistics, in May 2009 the median annual earnings were \$19.08 hourly for heating, air-conditioning and refrigeration mechanics and installers. With experience, wages can rise.

So, what are you waiting for? Heat up your career today by learning more about the Air Conditioning & Refrigeration Technology program at Texas State Technical College.



Planning, preparing and creating delicious food for others to enjoy requires a mixture of skills, talent and knowledge. It's not just a matter of throwing things together. There's budgeting, ordering, shopping, menu planning and meal presentation to consider, as well as contingency planning and dealing with emergencies that may crop up. And with an increasingly health-conscious society, dietary planning for restaurants, hospitals, hotels and other institutions, you'll need more knowledge and skills than ever before.

At Texas State Technical College, you'll not only learn to how to mix the right ingredients together to whip up appetizing meals, you'll also learn the dozens of associated ancillary tasks that will give you an edge above the competition in the field.

And the training will be well worth it. The food service industry is one of the most rapidly growing service sectors in the economy. Career opportunities exist in all areas of the industry, from basic food preparation to full production restaurant management. The U.S. Bureau of Labor reports the median annual wage-and-salary earnings of food preparation and serving supervisors were \$28,970 in May 2008. With experience, graduates can advance to management positions, earning even more.

The **Culinary Arts** Department at Texas State Technical College provides practical, hands-on instruction, experienced chefs and staff, top advisors and much more for culinary careers in programs designed to prepare successful professionals for today and tomorrow.

With the help of TSTC, successful professionals can look forward to a rich career with many rewards — and plenty of job stability.



Culinary Food Service Operations Certificate

Total Credits: 36

First Semester			Credits
TECH [^]	1100	Tech Success	
CTEX	10XX	Tech Success Seminars (3 as assigned)	1
CHEF	1205	Sanitation and Safety	2
CHEF	1301	Basic Food Preparation	3
IFWA	1217	Food Production and Planning	2
IFWA	1318	Nutrition for the Food Service Professional	3
ITSC	1309	Integrated Software Applications I	3
Semester Total			13

[^] Institutional Credit Only

Second Semester			Credits
IFWA	1319	Meat Identifying and Processing	3
IFWA	1401	Food Preparation I	4
RSTO	1221	Menu Management	2
RSTO	1380	Co-Op*	3
Semester Total			12

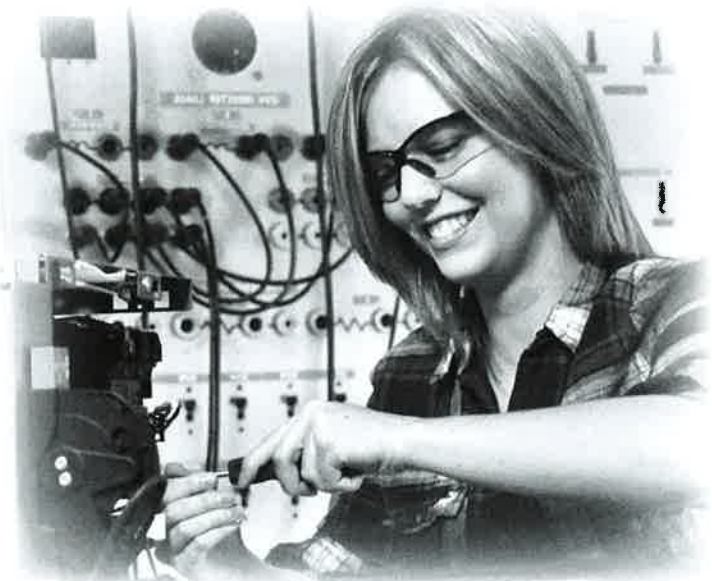
Third Semester			Credits
IFWA	1427	Food Preparation II	4
PSTR	1401	Fundamentals of Baking	4
RSTO	1325	Purchasing for Hospitality Operations	3
Semester Total			11

* This co-op class is a part time 20+ hr week job in an approved establishment that utilizes a POS system and where the student exchanges money with the customer.



Electrical Construction

Today's homes and businesses rely on electricity more than ever to power advanced entertainment systems, state-of-the-art information systems, communication devices, automated equipment and more. And the professionals trained in electrical construction and service provide the knowledge and skills needed to effectively deliver that electricity.



The one-year **Electrical Construction & Service Certificate** program offers specific coursework in residential and commercial wiring systems. The program also provides training opportunities to aid individuals interested in earning licenses specific to the electrical field. The program requires extensive hands-on work with electrical distribution and service applications.

Graduates who specialize in Electrical Construction & Service can qualify for positions such as commercial building maintenance electrician, construction electrician, electrical contractor, electrical maintenance technician, industrial maintenance electrician, residential electrician and sales representative. Most graduates will begin their careers as assistants to experienced electricians, installing electrical wiring in new construction and servicing wiring in existing structures. After the initial training period, graduates should be prepared to assume supervisory responsibilities.

The need for quality electricians is strong, and dedicated employees can anticipate good advancement opportunities. With experience and licensing, successful graduates can look toward additional opportunities and increasing wages.

The U.S. Department of Labor's Occupational Outlook Handbook 2010-11 edition reports Texas electricians made an average salary of nearly \$21 an hour, in positions such as commercial building maintenance electrician, construction electrician, electrical contractor and more. Opportunities exist throughout Texas, especially in Austin, Dallas, Ft. Worth and Houston.

Electrical Construction Certificate of Completion

Total Credits: 39

First Semester			Credits
TECH [^]	1100	Tech Success	
CTEX [^]	10XX	Tech Success Seminars (3 as assigned)	1
DFTG	1325	Blueprint Reading and Sketching	3
ELPT	1215	Electrical Calculations I	2
ELPT	1221	Introduction to Electrical Safety and Tools	2
ITSC	1309	Integrated Software Applications I	3
POFT	1301	Business English	3
Semester Total			13

[^]Institutional Credit Only

Second Semester			Credits
EECT	1200	Technical Customer Service	2
ELPT	1225	National Electrical Code I	2
ELPT	1311	Basic Electrical Theory	3
ELPT	1329	Residential Wiring	3
OSHT	1405	OSHA Regulations - Construction Industry	4
Semester Total			14

Third Semester			Credits
ELPT	1340	Master Electrician Exam Review I	3
ELPT	1341	Motor Control	3
ELPT	1345	Commercial Wiring	3
ELPT	2305	Motors and Transformers	3
Semester Total			12



Industrial Maintenance Mechanic



Texas State Technical College offers intensive training in **Industrial Maintenance Mechanic** designed to help you learn mechanical and electrical applications for industries ranging from manufacturing to food processing, pharmaceutical production to health care facility operations. As a graduate of the **Industrial Systems & Engineering Technology program**, you can apply skills targeting pumps, valves, motors, steam turbines, air compressors, hydraulic presses, pneumatic equipment, conveyor systems and more.

As equipment in these industries becomes more sophisticated, technicians must keep abreast of the changes. That's where TSTC can help. Through intense classroom and extensive laboratory training, you can gain the knowledge and skills necessary to join the workforce as a well-paid, qualified technician.

Upon successfully completing all required coursework, you may hold titles such as industrial maintenance mechanic, production maintenance mechanic and industrial mechanic.

Salaries for Industrial Systems & Engineering Technology technicians can vary widely, depending upon location, employer and experience. The U.S. Department of Labor's Occupational Outlook Handbook 2010-2011 indicates applicants with broad skills in machine repair and maintenance should have favorable job prospects. The increased use of machinery in manufacturing will require more millwrights to install this equipment and more mechanics and maintenance workers to keep it in good working order. Average hourly wages of industrial machinery mechanics were \$20.99 as of May 2008.

TSTC maintains close ties with established professionals like those found in organizations such as the International Maintenance Institute and the Fluid Power Society, or FPS — the industry contacts that provide peer support and involvement to enhance your career.

Industrial Maintenance Mechanic Certificate

Total Credits: 41

First Semester			Credits
TECH [^]	1100	Tech Success	
CTEX [^]	10XX	Tech Success Seminars (3 as assigned)	1
DFTG	1325	Blueprint Reading and Sketching	3
ELPT	1311	Basic Electrical Theory	3
HYDR	1201	Rigging and Conveying Systems	2
INMT	1305	Introduction to Industrial Maintenance	3
PFPB	2308	Piping Standards and Materials	3
Semester Total			14

[^]Institutional Credit Only

Second Semester			Credits
CBFM	1303	Boiler Maintenance	3
ELPT	1345	Commercial Wiring	3
INMT	2303	Pumps, Compressors & Mechanical Drives	3
WLDG	1307	Introduction to Welding Using Multiple Processes	3
Semester Total			12

Third Semester			Credits
ELPT	1341	Motor Control	3
HYDR	1305	Basic Hydraulics	3
INMT	1355	Industrial Power Plant Systems	3
INMT*	1380	Cooperative Education	3
INMT	2301	Machinery Installation	3
Semester Total			15

*Capstone course: A required learning experience which results in a consolidation and synthesis of a student's educational experience. The capstone experience certifies mastery of entry-level work place competencies.



Radio Communication Electronics

As the world becomes increasingly dependent on instantaneous, on-demand global communications, opportunity calls for those who can keep the lines open and messages flowing. From the transfer of voice, video and data for immediate communication, to the use of satellite transmissions for video conferencing and the infrastructure for the Internet and other distance learning capabilities, telecommunications technology keeps the world connected.

Texas State Technical College provides superior instruction on the latest industry-standard equipment in **Radio Communication**.



Radio Communication Electronics Certificate

Total Credits: 42

First Semester			Credits
TECH ^	1100	Tech Success	
CTEX ^	10XX	Tech Success Seminars (3 as assigned)	1
IEIR	1302	Direct Current (TP)	3
EECT	1300	Technical Customer Service	3
EECT	1303	Introduction to Telecommunications	3
EECT	1340	Telecommunications Transmission Media	3
Semester Total			12

^Institutional Credit Only

Second Semester			Credits
IEIR	1304	Alternating Current (TP)	3
CETT	1325	Digital Principles and Devices	3
CSIR	1341	Transceiver Troubleshooting I	3
CSIR	2301	Communication Electronics Components	3
Semester Total			12

Third Semester			Credits
CSIR	1344	General Communications Circuits	3
CSIR	1359	Digital Data Communication	3
CSIR	1355	Industry Certifications	3
CSIR	2359	Communication Antenna Systems	3
CSIR*	2343	Transceiver Troubleshooting II	3
EECT	2337	Wireless Telephony Systems	3
Semester Total			18

EECT Co-op classes maybe used for different courses, depending on the learning objectives of the position for cooperative education.

*Capstone course: A required learning experience which results in a consolidation and synthesis of a student's educational experience. The capstone experience certifies mastery of entry-level work place competencies.

TSTC program standards were created with input from companies such as Texas Cable and Telecommunications Association, Time-Warner Cable, Cox Communications, Comcast Communications, MCI and others.

Salaries can vary widely, depending on location, experience and employer. Telecommunications Technology graduates earn starting salaries of approximately \$30,000 per year. The average for these technicians in Texas is more than \$35,800. With experience, graduates can earn higher salaries and advance to technician supervisors, which can pay more than \$60,000 a year.



Combination Welding



You come into contact with a product of welding every day ... in the car you drive, in the buildings you visit, on the bridges you cross, even in the natural gas you use, which flows through welded pipes. Almost every manufacturing industry utilizes welding as the strongest way to join metal parts. That constant use results in a constant need for skilled, knowledgeable welders and welding technicians ... like graduates of **Welding Technology** at Texas State Technical College.

Welding Technology at TSTC has a strong history of providing top-notch instruction in welding, automation and robotics, non-destructive testing and other metallurgical processes. The program offers extensive hands-on experience. In addition to developing the specific techniques used in various welding processes, you can learn the complex theories behind those techniques that make TSTC Welding Technology graduates stand above the rest in the field.

The one-year **Combination Welding** program focuses on the skills and knowledge required for the welder qualification test for the American Welding Society, Section IX of the American Society of Mechanical Engineers Code and the American Petroleum Institute. As a graduate, you may go to work as a welder in general fabrication shops, on construction sites, in pressure vessel shops or shipyards; or, you may elect to pursue a pipe welding endorsement by completing work in an advanced exit point.

Graduates of the Welding Technology program can look forward to exceptional career opportunities. Figures from the U.S. Bureau of Labor Statistics indicate hourly earnings at a median of \$17 for welders and cutters in 2008, with high earnings jumping over \$25.44. BLS information also projects excellent job prospects for skilled welders and welding technicians, based on employers' reports of shortages in qualified applicants.

Combination Welding Certificate

Total Credits: 37

First Semester			Credits
TECH ^	1100	Tech Success	
CTEX ^	10XX	Tech Success Seminars (3 as assigned)	1
WLDG	1313	Introduction To Blueprint Reading	3
WLDG	1428	Introduction to Shielded Metal Arc Welding	4
WLDG	1430	Introduction to Gas Metal Arc Welding	4
Semester Total			11

^Institutional Credit Only

Second Semester			Credits
NDTE	1310	Liquid Penetrant/Magnetic Particle Testing	3
WLDG	1312	Introduction to Flux Cored Welding	3
WLDG	1417	Introduction to Layout and Fabrication	4
WLDG	1457	Intermediate Shielded Metal Arc Welding	4
Semester Total			14

Third Semester			Credits
WLDG	1434	Introduction to Gas Tungsten Arc Welding	4
WLDG	1435	Introduction to Pipe Welding	4
WLDG*	2443	Advanced Shielded Metal Arc Welding	4
Semester Total			12

*Capstone course: A required learning experience which results in a consolidation and synthesis of a student's educational experience. The capstone experience certifies mastery of entry-level work place competencies.

