2020-2021

SSHS Graduation Plans: Endorsements & Programs of Study Guide



Jenny Arledge Sulphur Springs High School 2020-2021

Sulphur Springs High School

Graduation Plans: Endorsement & Programs of Study Guide

The Sulphur Springs High School Graduation Plan: Endorsements and Programs of Study Guide is designed to help students and parents make informed decisions about planning for the future. The information in this guide is a great start to that process!

This guide provides information about the high school graduation requirements and descriptions of each endorsement/program of study. Career and education requirements, local employment needs, and certifications and licensures offered in each career area are also included.

IMPORTANT!

Be sure to contact the Director of College and Career Readiness or a guidance counselor about the important decisions that you will be making.

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Graduation Requirements for Students Entering 9th Grade

The 83rd Texas Legislature passed House Bill 5 into law changing the high school graduation plans for all students who were freshman during the 2014-15 school year and thereafter. The change requires a direct focus on College and Career Readiness and allows flexibility to meet the needs of each individual student. The graduation requirements include:

- Achieve mastery of End of Course Exams (EOC) in: English I, English II, Algebra I, Biology, and U.S. History.
- 2. Complete all requirements from the Foundation High School Plan (FHSP) Basic course credits that all students must complete.
- 3. Complete all requirements for a minimum of one Endorsement Additional credits required to pursue college and/or career goals.

Credits Required to Graduate:

Sulphur Springs High School requires students to earn 27 credits on the Foundation High School Plan with an Endorsement:

Students must declare their preferred Endorsement(s) in writing by the beginning of their 9th grade year. Students may change their Endorsement(s) with parental notification during their 9th grade year or at the beginning of their 10th grade year. By the end of the student's 10th grade year, no endorsement changes can be made.

SSHS Foundation High School Plan with Endorsement	27 Credits
English Language Arts	4
Mathematics	4
Science	4
Social Studies	4
Foreign Language	2
Fine Arts	1
Physical Education	1
Technology	1
Personal Health & Finance (Lifetime Nutrition & Wellness/Dollars & Sense)	1
Electives (4 must satisfy Endorsement curriculum requirements)	5
Total Credits	27

The Texas Education Code, Section 28.025(b), allows a student to graduate under the Foundation High School Program without earning an endorsement if, after the student's sophomore year, the student and the student's parent/guardian are notified of the benefits of graduating with an endorsement and the student's parent/guardian gives written permission for the student to opt out of an endorsement. Under the Foundation High School Plan without an endorsement, students are required to complete 27 credits to graduate.

Personal Graduation Plans (PGP)

8th Grade Career Exploration Graduation Plan Process

Students will choose their Endorsements after researching personal interests, careers, Endorsement options and long-term career goals in the fall semester during English classes. Guidance counselors will help guide students during the spring semester in ensuring that students have the correct Endorsement based on their career interests and help them plan their four-year graduation plan in Career Cruising.

Each student must have a four-year Personal Graduation Plan (PGP) created during the spring of 8th grade with the help of his/her guidance counselor. Parent participation is VITAL. Parents should meet with their child's guidance counselor to discuss the plan and are required to approve the plan and their child's Endorsement selection in writing. Each year the PGP will be reviewed with the student.

Career Cruising

Students' four-year Personal Graduation Plans are accessible to students, parents, and guidance counselors. To access Career Cruising, go to www.ssisd.net and select the Campuses link. Choose Sulphur Springs High School. The Career Cruising link is located on the left-hand side of the screen under the "Useful Links". Students will log in with their student email addresses and a password that they created.

Once students have selected their Endorsement(s), guidance counselors will enter their Endorsement selections into Career Cruising. Students can track their progress in completing graduation and Endorsement requirements within the Career Cruising system.



Course Levels

- 1) STANDARD This level is NOT weighted. Courses that are considered Standard courses are:
 - PSP Post-Secondary Prep
- **2) HONORS** This level is weighted at 0.5 above the Standard weight. Courses that are considered Honors courses are:
 - CP College Prep
 - DC Dual Credit
 - Concurrent Credit
- **3) ADVANCED PLACEMENT (AP) –** This level is weighted at 1.0 above the Standard weight. Courses that are considered AP will be labeled as such:
 - AP Advanced Placement

Distinguished Level of Achievement & Performance Acknowledgements

Students may earn a Distinguished Level of Achievement by successfully completing the following:

- a total of four credits in mathematics, which must include Algebra II
- a total of four credits in science
- the remaining curriculum for the Foundation High School Plan
- the curriculum requirements for at least one Endorsement
 - *A student must earn a Distinguished Level of Achievement to be eligible for top 10% automatic admission.

A student may earn a **Performance Acknowledgement** on the student's diploma and transcript for outstanding performance in the following areas:

- Earning dual credit
- Exhibiting bilingualism and bi-literacy
- Performing well on the SAT or ACT
- Earning a nationally or internationally recognized certification or licensure.

The details for earning **Performance Acknowledgements** in each area are outlined below:

- In a dual credit course by successfully completing:
 - At least 12 hours of college academic courses, including those taken for dual credit as part of the Texas core curriculum and advanced technical credit courses with a grade of the equivalent of 3.0 or higher on a scale of 4.0 OR
 - 2. Earning an Associate's Degree while in high school.
- In **bilingualism and biliteracy** by demonstrating proficiency in accordance with local school district grading policy in two or more languages by:
 - 1. Completing all English language arts requirements and maintaining a minimum grade point average (GPA) of the equivalent of 80 on a scale of 100; **AND**
 - 2. Satisfying one of the following:
 - Completion of a minimum of three credits in the same language in a language other than English with a minimum GPA of the equivalent of 80 on a scale of 100; OR
 - Demonstrated proficiency in the Texas Essential Knowledge and Skills for Level IV or higher in a language other than English with a minimum GPA of the equivalent of 80 on a scale of 100: OR
 - Completion of at least three credits in foundation subject area courses in a language other than English with a minimum GPA of 80 on a scale of 100; OR
 - Demonstrated proficiency in one or more languages other than English through one of the following methods:
 - A score of 3 or higher on a College Board AP exam for a language other than English; OR
 - Performance on a national assessment of language proficiency in a language other than English of at least Intermediate High or its equivalent

In addition to meeting the requirements to earn a performance acknowledgement in bilingualism and biliteracy, an English Language Learner must also have:

- Participated in and met the exit criteria for a bilingual or English as a second language (ESL) program; **AND**
- Scored at the Advanced High level on the Texas English Language Proficiency Assessment System (TELPAS)
- On a College Board Advanced Placement (AP) test by:
 - 1. Earning a score of 3 or above.
- On the PSAT ®, the ACT-PLAN, the SAT®, or the ACT® by:
 - 1. Earning a score on the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT®) that qualifies the student for recognition as a commended scholar or higher by the College Board and National Merit Scholarship Corporation, as part of the National Hispanic Recognition Program (NHRP) of the College Board or as part of the National Achievement Scholarship Program of the National Merit Scholarship Corporation
 - 2. Achieving the college readiness benchmark score on at least two of the four subject tests on the ACT-PLAN® examination
 - 3. Earning a combined critical reading and mathematics score of at least 1250 on the SAT®; or
 - 4. Earning a composite score on the ACT® examination of 28 (excluding the writing subscore)
 - Earning a nationally or internationally recognized business or industry certification or license in a Career & Technical Education Program of Study.

Five Endorsement Areas

- 1. **Arts & Humanities:** Includes courses directly related to political science, world languages, cultural studies, English literature, history, and fine arts.
- 2. **Business & Industry:** Highly varied occupations in both service and manufacturing industries ranging from industrial and technical trades to business, marketing and finance.
- 3. <u>Public Service:</u> Service-oriented occupations for both private and public sector industries including health sciences, education and training, law enforcement, and human services.
- 4. **STEM:** Rigorous coursework and occupations centered on applied science, mathematics, and technology
- 5. <u>Multidisciplinary:</u> Allows students to select courses from the curriculum of each endorsement area and earn credits in a variety of advance courses from multiple content areas sufficient to complete the distinguished level of achievement.

Articulated Course Credits

Articulated course credit allows high school students to receive college credit for technical courses they completed while in high school. The articulation process eliminates the need for duplication of courses at the college level. Articulated credit is absolutely FREE! Students can take up to 15 credit hours of articulated credit that saves in the form of time and college tuition and fees.

Articulation Agreement with Paris Junior College (PJC)

Sulphur Springs High School has articulation agreements with Paris Junior College (PJC) for several high school Career & Technical Education (CTE) courses. There are requirements in order for students to earn the articulated credits through PJC. Those requirements are:

- 1. Must meet all college admission requirements.
- 2. Must have graduated from high school on the Recommended Graduation Plan or Foundation High School Plan with an Endorsement.
- 3. Must select and have an approved college AAS or Certificate Degree Plan on file with PJC.
- 4. Must have completed the specified high school course(s) with a minimum grade of 80.
- 5. Must be currently enrolled in PJC and have completed twelve (12) semester hours of credit (which can include dual credit/concurrent credit coursework taken in high school).
- 6. Request for college credit to be granted for the articulated courses within fifteen (15) months from the date of high school graduation.

Articulated Courses

SSHS	PJC	PJC			
Course	Course	SSHS Course	Course	SSHS Course	PJC Course
Accounting I	ACNT 1311	Business Information Management (BIM) I AND BIM II	ITSC 1309	Principles of Health Science	HPRS 1201
Accounting II	ACNT 1303	Business Law AND Principles of Business, Marketing & Finance	BUSG 1301	Principles of Information Technology	ITSC 1301
Ag Mechanics & Metal Technologies	WLDG 1313	Court Systems & Practices	CRIJ 1306	Touch Systems Data Entry	POFT 1329
Anatomy & Physiology	MDCA 1309	Health Science Theory	HPRS 1102	Web Technologies	IMED 1316
Architectural Design I	DFTG 1309	Medical Terminology	HITT 1305	Welding I	WLDG 1307
Architectural Design II	DFTG 1305	Money Matters AND Principles of Business, Marketing & Finance	BUSG 1304		

Arts & Humanities Endorsements & Programs of Study

The Arts & Humanities Endorsement allows students to follow their interests in fine arts, foreign language or the general humanities.

Fine Arts Requirements: A coherent sequence of four credits by selecting courses from one or two categories or disciplines in fine arts.

Foreign Language Requirements: Four levels of the same language or two levels of each of the foreign languages offered.

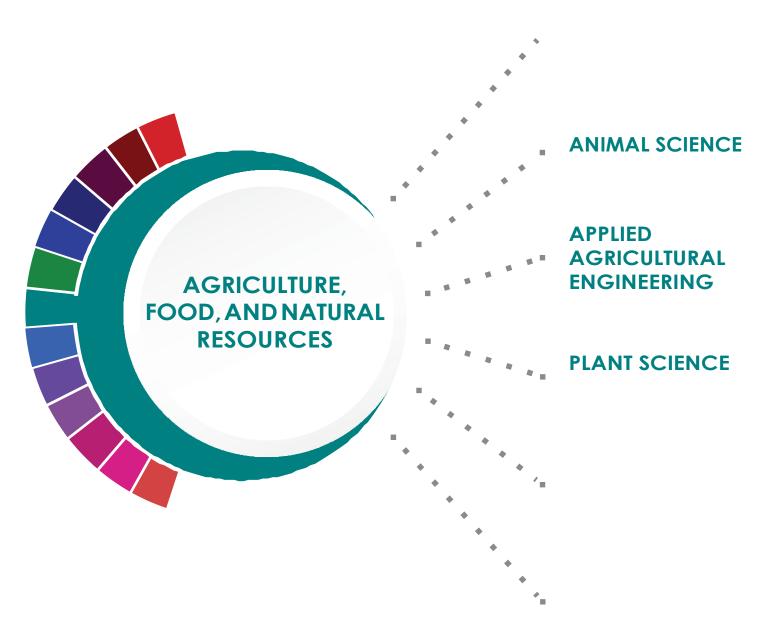
Social Studies Requirements: Completion of five social studies credits. *Endorsement electives may serve as Foundation electives as well.*



Programs of Study	Course Sequence
Art (4 credits) Career Requirements: Bachelor's Degree +	9 th Grade: Art I (Fine Arts Credit) 10 th Grade: Art II 11 th Grade: Art III 12 th Grade: Art IV
Dance (4 credits) Career Requirements: Bachelor's Degree +	9 th Grade: Dance I (Fine Arts Credit) 10 th Grade: Dance II 11 th Grade: Dance III 12 th Grade: Dance IV
Foreign Language - French (4 credits) Career Requirements: Bachelor's Degree +	9 th Grade: French I CP (Foreign Language Credit) 10 th Grade: French II CP (Foreign Language Credit) 11 th Grade: French III CP 12 th Grade: French IV CP
Foreign Language - Spanish (4 credits) Career Requirements: Bachelor's Degree +	9 th Grade: Spanish I CP (Foreign Language Credit) 10 th Grade: Spanish II CP (Foreign Language Credit) 11 th Grade: Spanish III CP 12 th Grade: Spanish IV CP

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Programs of Study	Course Sequence
French & Spanish (4 credits) Career Requirements: Bachelor's Degree +	9 th Grade: Spanish I CP (Foreign Language Credit) 10 th Grade: Spanish II CP (Foreign Language Credit) 11 th Grade: French I CP 12 th Grade: French II CP
Music Instrumental (4 credits) Career Requirements: Bachelor's Degree +	9th Grade: Marching Band (1/2 PE Credit) AND Concert Band (1/2 Fine Arts Credit) OR Stage Band Jazz OR Strings 10th Grade: Marching Band (1/2 PE Credit) AND Concert Band (1/2 Fine Arts Credit) OR Stage Band Jazz OR Strings 11th Grade: Marching Band AND Concert Band OR Stage Band Jazz OR Strings 12th Grade: Marching Band AND Concert Band OR Stage Band Jazz OR Strings
Music Vocal (4 credits) Career Requirements: Bachelor's Degree +	 9th Grade: Music History OR Choir (Fine Art Credit) 10th Grade: Choir (Wildcat Singers, Wildcat Chorale, Bella Voce, Rhapsody) 11th Grade: Choir (Wildcat Singers, Wildcat Chorale, Bella Voce, Rhapsody) 12th Grade: Choir (Wildcat Singers, Wildcat Chorale, Bella Voce, Rhapsody)
Social Studies (5 credits – 4 already satisfy Foundation Plan) Career Requirements: Bachelor's Degree +	9th Grade: World Geography 10th Grade: World History 11th Grade: US History 12th Grade: US Government/Economics AND 5th Endorsement Social Students Credit – Choose two (for 1 Credit Total): Psychology PSP (1/2 Credit) Sociology (1/2 Credit) Old Testament Studies (1/2 Credit) New Testament Students (1/2 Credit)
Theatre Arts (4 credits)	9 th Grade: Theatre Arts I OR Technical Theatre I (Fine Art Credit) 10 th Grade: Theatre Arts II OR Technical Theatre II 11 th Grade: Theatre Arts III OR Technical Theatre III 12 th Grade: Theatre Arts IV OR Technical Theatre IV

BUSINESS & INDUSTRY ENDORSEMENTS

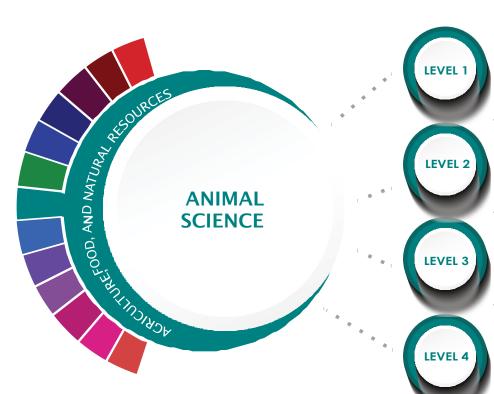


Local Implementation Considerations:

Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.





COURSES

Principles of Agriculture, Food, and Natural Resources

Small Animal Management Equine Science

Livestock Production (Advanced Level Course)

Veterinary Medical Applications/Lab

Advanced Animal Science Practicum in Agriculture, Food, and Natural Resources

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Veterinary Assistant	Pet Groomer	Food Science and Technology	Animal Sciences	Genetics
	Veterinary Technician	Veterinary Studies	Agriculture	Veterinary Medicine
	Licensed Breeder	Biotechnology Laboratory Technician	Biology	Biological and Physical Sciences
		Biology Technician	Zoology/ Animal Biology	Biological and Biomedical Sciences

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Animal Breeders	\$39,135	28	9%
Animal Scientists	\$57,533	22	12%
Medical Scientists	\$63,898	435	27%
Veterinarians	\$93,496	294	24%
Zoologists and Wildlife Biologists	\$67,309	45	32%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:

Texas FFA

Work Based Learning Activities:

Agri-Science Fair

4H

Volunteer at a local farm or veterinary office

The Animal Science program of study focuses on the science, research, and business of animals and other living organisms. It teaches students how to apply biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students may also research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.



The Agriculture, Food, and Natural Resources (AFNR) Career Cluster® focuses on the essential elements of life—food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PRE REQS CO REQS	GRADE
Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	9-12
Small Animal Management	13000400 (0.5 credit)	None	10-12
Equine Science	13000500 (0.5 credit)	None	10-12
Livestock Production/ Lab	13000310 (1 credit) 13000310 (2 credits)	None	10-12
Advanced Animal Science	13000700 (1 credit)	PREQ: Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production;	11-12
Veterinary Medical Applications/ Lab	13000600 (1 credit) 13000610 (2 credits)	PREQ: Equine Science, Small Animal Management, or Livestock Production	11-12
Practicum in Agriculture, Food, and Natural Resources	13002500 (2 credits) 13002505 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCES CAREER CLUSTER, PLEASE CONTACT:

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COURSES

Principles of Agriculture, Food, and Natural Resources

LEVEL 2

LEVEL 1

Agricultural Mechanics and Metal Technologies

Agricultural Structures Design and Fabrications/Lab



Agricultural Equipment Design and Fabrication/Lab Practicum in Agriculture, Food, and Natural Resources



POSTSECONDARY OPTIONS

APPLIED AGRICULTURAL

ENGINEERING

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
AWS SENSE Welding Level 1	Certified Professional Agronomist	Heavy Equipment Maintenance Technology/ Technician	Agricultura	I Engineering
AWS D1.1 or D9.1 Certification	Certified Reliability Engineer	Agricultural Mechanization, General	Agricultural Mechanization, Gen	
	Certified Irrigation Designer	Small Engine Mechanics and RepairTechnology/ Technician		
	Fluid Power Mobile Hydraulic Mechanic	Welding Technology/ Welder		

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Outdoor Power Equipment and Other Small Engine Mechanics	\$32,406	366	16%
Welders	\$41,350	6,171	9%
Farm Equipment Mechanics and Service Technicians	\$39,915	304	17%
Mobile Heavy Equipment Mechanics	\$47,299	1,627	16%
Agricultural Engineers	\$64,792	9	13%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Tour a farm products or machinery plant Texas FFA

Work Based Learning Activities:

Earn a welding certification; intern at a farm products or machinery plant

The Applied Agricultural Engineering program of study explores the occupations and educational opportunities associated with applying knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing agricultural products. This program of study may also include exploration into diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.

Successful completion of this program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019

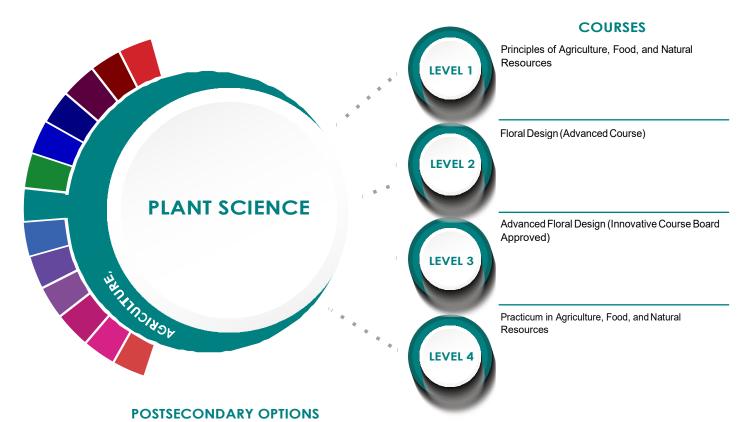


COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ) RECOMMENDED PREREQUISITES (RPREQ) RECOMMENDED COREQUISITIES (CREQ)	GRADE
Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	9-12
Agricultural Mechanics and Metal Technologies/ Lab	13002200 (1 credit) 13002210 (2 credits)	None	10-12
Agricultural Structures Design and Fabrications/ Lab	13002300 (1 credit) 13002310 (2 credits)	PREQ: Agricultural Mechanics and Metal Technologies	11-12
Agricultural Equipment Design and Fabrication/ Lab	13002350 (1 credit) 13002360 (2 credits)	None	11-12
Practicum in Agriculture, Food, and Natural Resources	13002500 (2 credits) 13002505 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCES CAREER CLUSTER, PLEASE CONTACT:

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HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELO DEGREI

Member of AIFD

MASTER'S/ R'S **DOCTORAL PROFESSIONAL DEGREE**

Texas State Floral Pesticide Applied Horticulture/ Association Level **Applicator** Horticulture Operations, General One Floral Certification Texas State Floral Certified Floral Ornamental Agronomy and Crop Science

Designer Horticulture Accredited

Agricultural Business and Management, General

Landscape Turf and Turfgrass Management Industry Certified Technician

Farm/Farm and Ranch Management

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Soil and Plant Scientists	\$54,662	116	21%
Tree Trimmers and Pruners	\$32,240	589	14%
Pesticide Handlers, Sprayers, and Applicators	\$36,733	196	22%
Landscaping Supervisors	\$44,408	807	19%
Biological Technicians	\$42,931	452	17%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Texas FFA

Work Based Learning Activities:

Work part-time at a

florist;

start or work for a local landscaping business

The Plant Science program of study focuses on the science, research, and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster® focuses on the essential elements of life—food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Association Level

Two Floral Certification

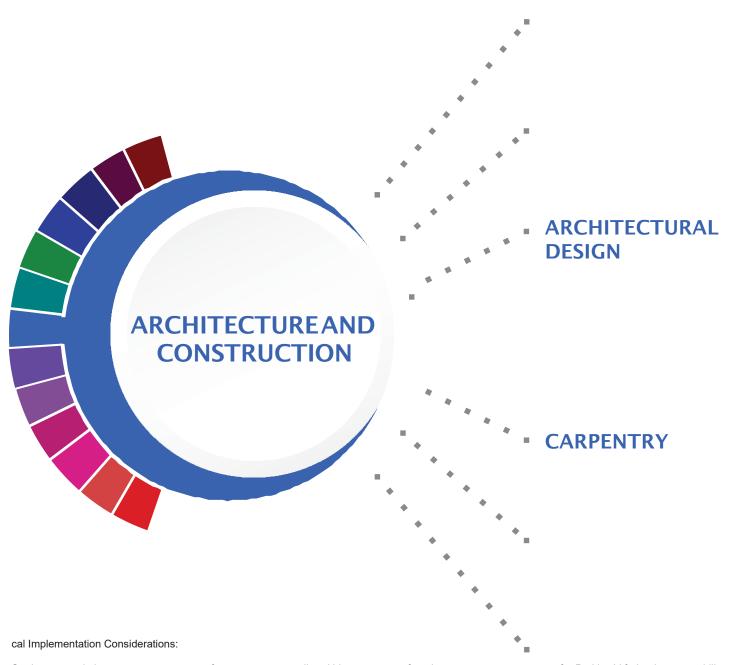
COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	9-12
Floral Design	13001800 (1 credit)	None	9-12
Advanced Floral Design	N1300270 (1 credit)	PREQ: Floral Design	11-12
Practicum in Agriculture, Food, and Natural Resources	13002500 (2 credits) 13002505 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCES CAREER CLUSTER, PLEASE CONTACT:

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BUSINESS & INDUSTRY ENDORSEMENTS



Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



COURSES

Principles of Architecture

ARCHITECTURAL DESIGN

LEVEL 2

LEVEL 3

Architectural Design I Interior Design I

Architectural Design II Interior Design II

Practicum in Architectural Design Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Autodesk Certified Professional or User in AutoCAD	Certified Photogrammetric Technologist		Architecture	
Autodesk Certified Professional or User in Autodesk Revit Architecture	Certified Development, Design & Construction Professional	Interior Design		Interior Architecture
	National Council Certified Interior Designer	Civil Engineering, General		eneral
	LEED AP Building Design & Construction	Geographic Information Science and Cartography		

 $\label{thm:condition} \mbox{Additional industry based certification information is available from the TEA\ CTE\ website.}$

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Architects	\$77,043	808	16%
Geographic Information Analysts and Surveyors	\$58,926	162	27%
Architectural/ Civil Drafters	\$50,170	1,068	9%
CivilEngineers	\$89,960	2,394	12%
Construction Managers	\$87,402	2,401	14%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Shadow an architect, interior designer, or civil engineer. SkillsUSA Work Based Learning Activities:

Intern at an architecture

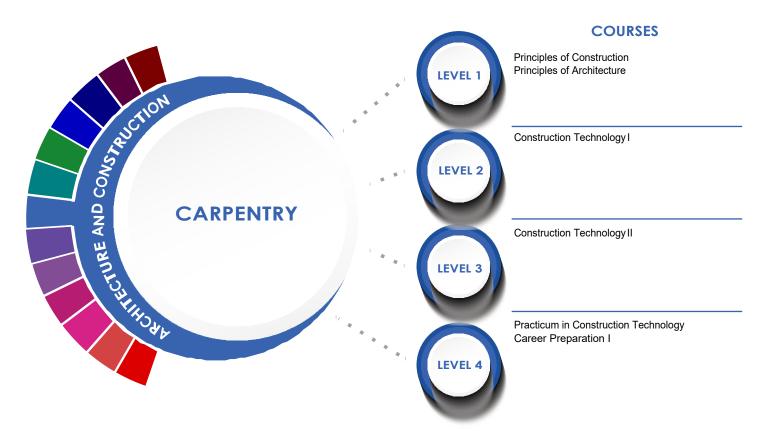
The Architectural Design program of study explores the occupations and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study may also include exploration into collecting and interpreting geographic information, researching and preparing maps, and interior design.

The Architecture and Construction Career Cluster @focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Architecture	13004210 (1 credit)	None	9-12
Architectural Design I	13004600 (1 credit)	PREQ: Algebra I and English I	10-12
Interior Design I	13004300 (1 credit)	PREQ: Algebra I and English I	10-12
Architectural Design II	13004700 (2 credits)	PREQ: Architectural Design I or Advanced Interior Design and Geometry	11-12
Interior Design II	13004400 (2 credits)	PREQ: English II, Geometry, and Interior Design I	11-12
Practicum in Architectural Design	13004800 (2 credits)	PREQ: Architectural Design II	12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net



HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
NCCER Core Curriculum	Certified Lead Carpenter	Carpentry/ Carpenter	Construction Science	Construction Management
NCCER Construction Technology	Certified Installer	Industrial Mechanics and Maintenance Technology		
	Certified Door Consultant			
	Fluid Power Connector and Conductor			

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Carpenters	\$35,922	5,031	26%
Cost Estimators	\$63,939	2,239	21%

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Shadow a carpenter or millwright. SkillUSA Work Based Learning Activities: Obtain an NCCER certification in Millwright Level 1 or Carpentry Level 1.

The Carpentry program of study explores the occupations and educational opportunities related to constructing, installing, or repairing structures and fixtures made of wood, such as concrete forms (including frameworks, partitions, joists, studding, rafters, and stairways). This program of study may also include exploration into installing, dismantling, or moving machinery and heavy equipment according to layout plans, blueprints, or other drawings.

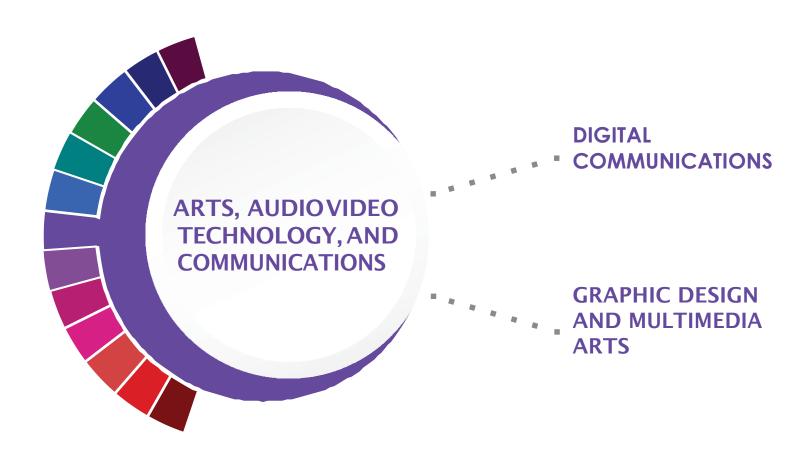
The Architecture and Construction Career Cluster @focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Construction	13004220 (1 credit)	None	9-12
Principles of Architecture	13004210 (1 credit)	None	9-12
Construction Technology I	13005100 (2 credits)	None	10-12
Construction Technology II	13005200 (2 credits)	PREQ: Construction Technology I	11-12
Practicum in Construction Technology	13005250 (2 credits) 13005255 (3 credits)	PREQ:Construction Technology II	12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

BUSINESS & INDUSTRY ENDORSEMENTS

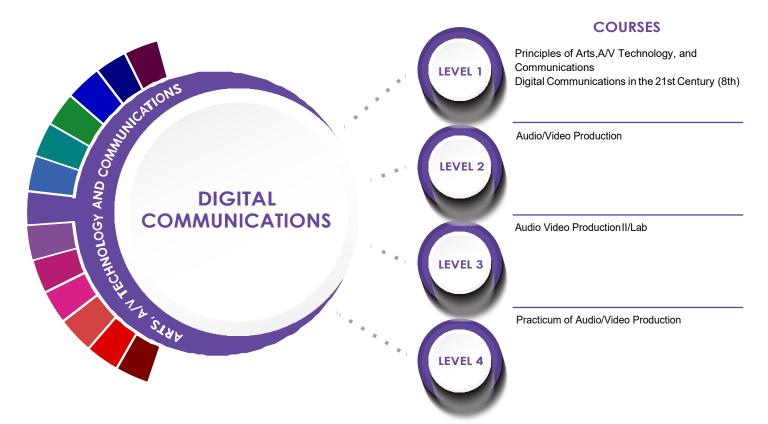


Local Implementation Considerations:

Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.





HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Adobe Certified Associate Premiere Pro	Certified Video Engineer	Record Technology	ling Arts /Technician	Communications Technology/ Technician
Adobe Certified Associate Certifications	Commercial Audio Technician	Cinematography and Film/ Video Production		
	Certified AM Directional Specialist	Radio and Television Broadcasting Technology/ Technician	Radio an	d Television
	Certified Broadcast Radio Engineer	Music Technology	· ·	ommunication/ nalism
Additional indus	try based certificat	ion information is a	vailable from the T	FA CTF website

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Sound Engineering Technicians Camera	\$39,562	79	27%
Operators, Television, Video and Motion Picture	\$50,024	129	9%
Audio and Video Equipment Technicians	\$40,581	757	29%
Filmand Video Editors	\$47,382	118	23%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:

Work Based Learning

Shadow a production team

Activities:

SkillsUSA

Intern at a local television station or video production

company

The Arts, A/V Technology and Communications (AAVTC) Career Cluster® focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services. Careers in the AAVTC career cluster require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication.

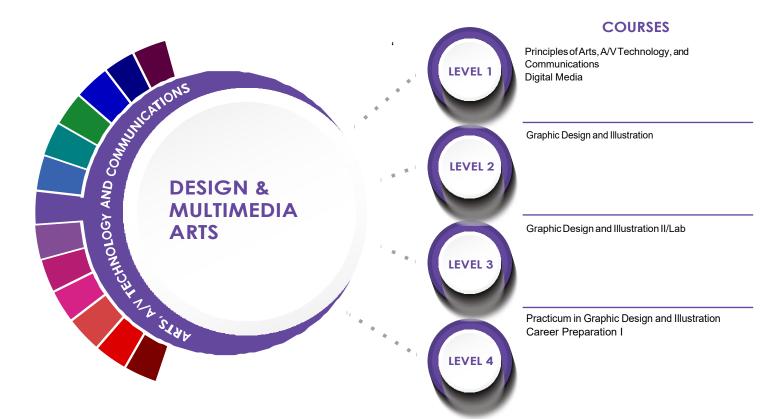
Successful completion of the Digital Communications program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019



COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Arts,A/V Technology, and Communications	13008200 (1 credit)	None	9
Digital Communications in the 21st Century (8th Grade)	03580610 (1 credit)	None	9-12
Audio/Video Production I	13008500 (1 credit)	None	9-12
Audio Video Production II/Lab	13008610 (2 credits)	PREQ: Audio/Video Production I	10-12
Practicum of Audio/Video Production	13008700 (2 credits)	PREQ: Audio/Video Production II	11-12

FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VISUAL TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT:



HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Adobe Certified Associate Certifications	Certified Digital Designer	Animation, Intera	ctive Technology, \ Special Effects	/ideo Graphics and
	WOW Certified Web Designer Apprentice		Graphic Design	
	Adobe Suite Certifications	Game and Interac	ctive Media Design	Intermedia/ Multimedia

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Graphic Designers	\$44,824	1,433	15%
Multimedia Artists and Animators	\$67,392	186	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Join a website development or coding club. SkillsUSA Work Based Learning Activities:

Intern with a multimedia or animation studio.
Obtain a certificate in graphic design.

 $\label{lem:condition} \mbox{Additional industry based certification information is available from the TEA CTE website.}$

For more information on postsecondary options for this program of study, visit TXCTE. org.

The Graphic Design and Multimedia Arts program of study explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.



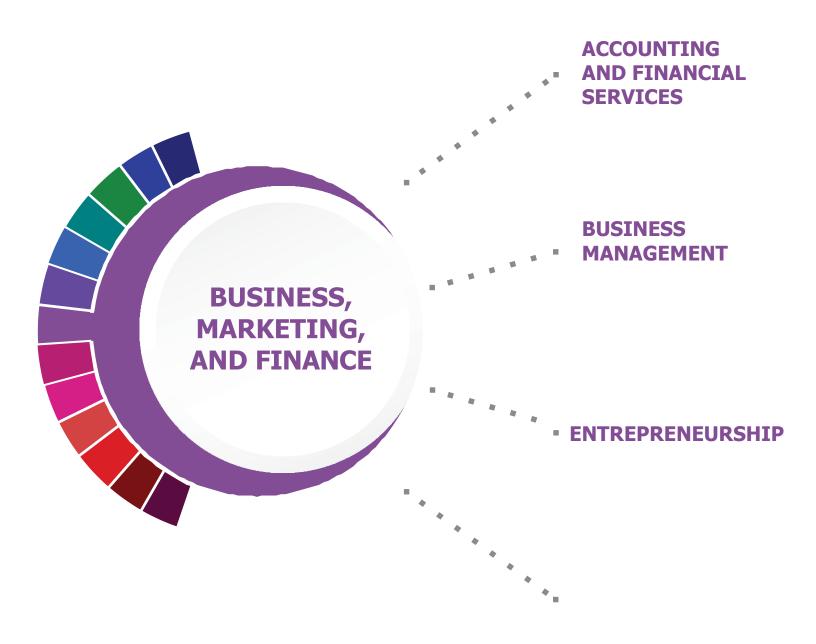
The Arts, A/V Technology and Communications (AAVTC) Career Cluster® focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services. Careers in the AAVTC Career Cluster require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Arts, A/ V Technology, and Communications	13008200 (1 credit)	None	9
Digital Media	13027800 (1 credit)	None	9-12
Graphic Design and Illustration I	13008800 (1 credit)	None	10-12
Graphic Design and Illustration II	13009310 (2 credits)	PREQ: Graphic Design and Illustration I	10-12
Practicum in Graphic Design and Illustration	13009000 (2 credits)	PREQ: Graphic Design and Illustration II Lab	11-12

FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VISUAL TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

BUSINESS & INDUSTRY ENDORSEMENTS



Local Implementation Considerations:

Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.







Principles of Business, Marketing, and Finance Money Matters Business Information Management I

Accounting I

LEVEL 2

LEVEL 3

LEVEL 4

Accounting II

Practicum in Business Management Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
QuickBooks Certified User	Certified Management Accountant	Real Estate	Accounting	Financial Accounting
Microsoft Office Specialist or Expert - Excel	Certified Internal Auditor	Financial, General		Business Administration
	Certified Income Specialist	Financial Planning and Services		Financial Planning
	Certified Public Accountant	Certified Inco	ome Specialist	

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Accountants and Auditors	\$71,469	14,436	22%
Loan Officers	\$68,598	2,419	19%
Personal Financial Advisors	\$86,965	1,861	52
Administrative Service Managers	\$96,138	2,277	21%
Insurance Underwriters	\$66,206	594	14%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Business Professionals of America (BPA), Future Business Leaders of America (FBLA), and DECA Work Based Learning Activities: Internship with local accounting firm; Microsoft Office Specialist (MOS) certifications

The Accounting and Financial Services program of study teaches CTE concentrators how to examine, analyze, and interpret financial records. Through this program of study, students will learn the skills necessary to perform financial services, prepare financial statements, interpret accounting records, give advice, or audit and evaluate statements prepared by others. This program of study will also introduce students to mathematical modeling tools.



The Business, Marketing, and Finance Career Cluster® focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) Corequisites (Creq)	GRADE
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	9-11
Business Information Management I	13011400 (1 credit)	None	9-12
Accounting I	13016600 (1 credit)	None	10-12
Accounting II	13016700 (1 credit)	PREQ: Accounting I	11-12
Practicum in Business Management	13012200 (2 credits)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net





Principles of Business, Marketing, and Finance



LEVEL 1

Business Information Management I/Lab



Business Information Management II/Lab (Not Advanced Course)



Practicum in Business Management Career Preparation I

				-
HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Microsoft Office Specialist or Expert - Excel	Certified Records Manager	В	usiness Administra	ation
Microsoft Office Specialist or Expert - Word	Certified Facility Manager	Business/	Commerce	Business Management
	Certified Commercial Contracts Manager	F	Public Administrati	on
	Teradata 14 Basics/ Certified Technical Specialist	Business Management	Managem	ent Science
Additional	industry based certifi	cation information is	available from the TE	EA CTE website.

For more information on postsecondary options

for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Administrative Service Managers	\$96,138	2,277	21%
Management Analysts	\$87,651	4,706	32%
General and Operations Managers	\$107,640	18,679	20%
Operations Research Analysts	\$78,083	1,128	38%
Supervisors of Administrative Support Workers	\$57,616	14,982	20%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Business Professionals of America (BPA), **Future Business Leaders** of America (FBLA), and **DECA**

Work Based Learning Activities:

Internship with local business or chamber of commerce;

The Business Management program of study teaches CTE concentrators how to plan, direct, and coordinate the administrative services and operations of an organization. Through this program of study, students will learn the skills necessary to formulate policies, manage daily operations, and allocate the use of materials and human resources. This program of study will also introduce students to mathematical modeling tools and organizational evaluation methods.



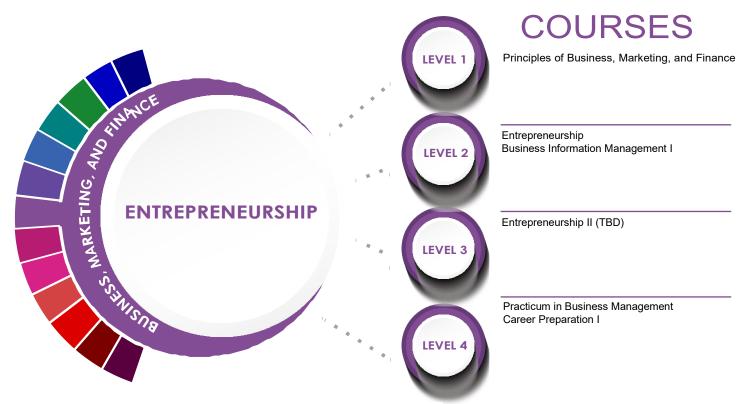
The Business, Marketing, and Finance Career Cluster® focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	9-11
Business Information Management I/ Lab	13011400 (1 credit) 13011410 (2 credits)	None	9-12
Business Information Management II/ Lab	13011500 (1 credit) 13011510 (2 credits)	PREQ: Business Information Management I	10-12
Practicum in Business Management	13012200 (2 credits)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER, PLEASE CONTACT:

Dale Fowler | Dale.Fowler@tea.texas.gov

https://tea.texas.gov/cte



HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Microsoft Office Expert - Excel	Certified Facility Manager	Business Administration and Management		
Microsoft Office Expert - Word	Certified Management Accountant	Business/ Commerce		
Entrepreneurshi p and Small Business	Certified Project Consultant	Public Administration		
	Accredited Management Consultant	Business Management	Managen	nent Science
Additional	industry based certifi	cation information is	available from the TE	EA CTE website.

For more information on postsecondary

TXCTE.org.

options for this program of study, visit

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
	#407.040	40.070	

General and \$107,640 18,679 20% Operations

Managers

Management \$87,651 4,706

32% Analysts

Managers, All \$113,110 1,794

26% Others

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Work Based Learning
Business Professionals of Activities:

America (BPA), Future Business Leaders of America (FBLA), and

Internship with local management consulting

firm

DECA

The Entrepreneurship program of study teaches CTE concentrators how to plan, direct, and coordinate the management and operations of public or private sector organizations. Through this program of study, students will learn the skills necessary to formulate policies, manage daily operations, analyze management structures, and plan for the use of materials and human resources.



The Business, Marketing, and Finance Career Cluster® focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	9-11
Business Information Management I	13011400 (1 credit)	None	9-12
Entrepreneurship	13034400 (1 credit)	None	10-12
Entrepreneurship II (TBD)	TBD	TBD	11-12
Practicum in Business Management	13012200 (2 credits)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER, PLEASE CONTACT:

PUBLIC SERVICE ENDORSEMENT

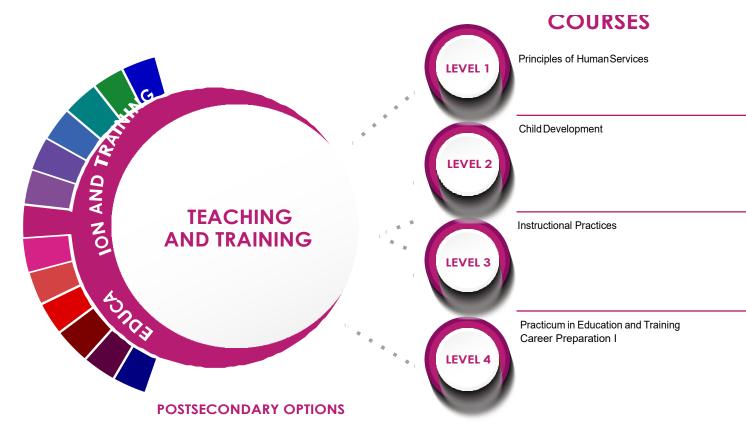


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HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Educational Aide I	Texas Educator Certification Program	Teacher Education	Bilingual and Multilingual Education	Instruction and Learning
	Educational Instructional Technology	Education, General (or specific subject area)		Educational Leadership and Administration, General
	Counselor, Professional	Special Education		1
	Athletic Trainer		d Physical n/Fitness	Social and Philosophical Foundations of Education

 $\label{lem:condition} \mbox{Additional industry based certification information is available from the TEA\ CTE\ website.}$

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Adult Basic and Secondary Education and Literacy Teachers and Instructors	\$48,069	862	17%
Middle School Teachers, Except Special and Career/ Technical Education	\$54,510	6,407	15%
Career and Technical Education Teachers, Secondary School	\$56,360	719	9%
Special Education Teachers, Secondary School	\$56,720	980	18%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Texas Association of Future Educators, or Family, Career and Community Leaders of America Work Based Learning Activities:

Teach a community education class; intern as a teaching assistant or tutor; serve as a camp counselor.

The Teaching and Training program of study prepares students for careers related to teaching, instruction, and creation of instructional and enrichment materials. The program of study introduces CTE concentrators to a wide variety of student groups and their corresponding needs. It familiarizes them with the processes for developing curriculum, coordinating educational content, and coaching groups and individuals.



The Education and Training Career Cluster® focuses on planning, managing, and providing education and training services and related learning support services. All parts of courses are designed to introduce learners to the various careers available within the Education and Training career cluster.

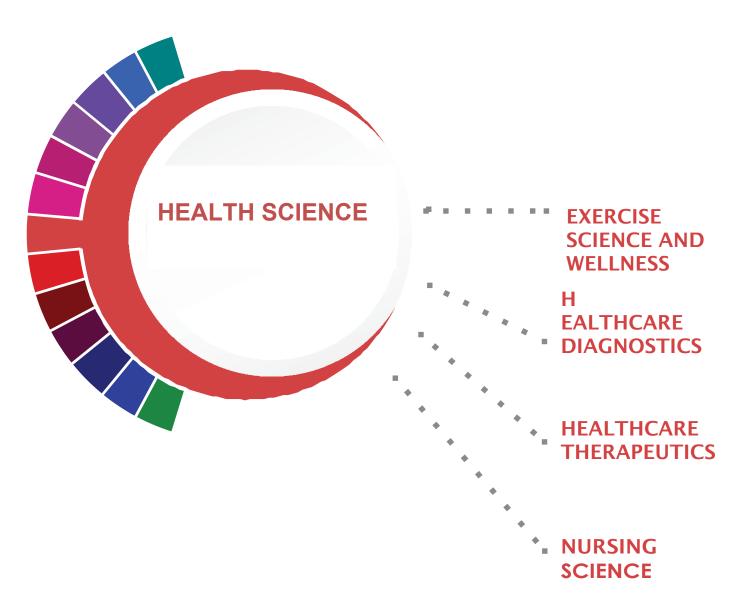
COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Education and Training	13014200 (1 credit)	None	9-10
Principles of Human Services	13024200 (1 credit)	None	9-12
Child Development	13024700 (1 credit)	None	10-12
Instructional Practices	13014400 (2 credits)	None	11-12
Practicum in Education and Training	13014500 (2 credits)	PREQ: Instructional Practices	12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE EDUCATION AND TRAINING CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

PUBLIC SERVICE ENDORSEMENTS



Local Implementation Considerations:

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COURSES

Principles of Exercise Science and Wellness (TBD)

LEVEL 2

LEVEL 1

Kinesiology I (TBD)



Anatomy and Physiology



Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Personal Trainer	Physical Therapist Assistant	Kinesiologyand	Exercise Science	Exercise Physiology
	Physical Therapy Aides	Therapeutic	Recreation/ Recre	eational Therapy
	Dietetic Technician	At	hletic Training/ Tra	ainer
			Dietitians and Nutritionists	Physical Therapist
Additional	industry based certifi	cation information is	available from the TE	EA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

EXERCISE SCIENCE

AND WELLNESS

OCCUPATIONS		MEDIAN WAGE	ANNUAL OPENINGS
Athletic Trainers	\$53,450	215	22%
Exercise Physiologists	\$41,662	33	33%
Coaches and Scouts	\$40,010	2,133	23%
Medical and Health Service Managers	\$57,762	428	24%
Recreational Therapists	\$45,906	74	24%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Health Occupation Students of America (HOSA)

Career Prep Activities: Volunteer at a hospital or rehabilitation center; manage a school sports team

The Exercise Science and Wellness program of study introduces students to the fields that assist patients with maintaining physical, mental, and emotional health. Students will research diet and exercise needed to maintain a healthy, balanced lifestyle and learn about and practice techniques to help patients recover from injury, illness, or disease.



The Health Science Career Cluster® focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ) RECOMMENDED PREREQUISITES (RPREQ) RECOMMENDED COREQUISITIES (CREQ)	GRADE
Principles of Exercise and Wellness	TBD	TBD	TBD
Kinesiology I	TBD	TBD	TBD
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit; RPREQ: a course from the Health Science cluster	10-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

COURSES

Principles of Health Science

LEVEL 2

Medical Terminology



Health Science Theory



Anatomy and Physiology Practicum in Health Science

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE S DEGREE	BACHELOR S DEGREE	MASTER S/ DOCTORAL PROFESSIONAL DEGREE
Medical Laboratory Technician	Medical Sonographer	Nuclear Medica Techno	0,	Radiologist
Phlebotomy Technician	Radiologic Technologist	Magnetic Resonance Imaging (MRI) Technology/ Technician	Medical Radiologic Technology/ Science Radiation Therapist	Radiologic Technology/ Science - Radiographer

HEALTHCARE

DIAGNOSTICS

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Diagnostic Medical Sonographers	\$69,909	495	35%
Phlebotomists	\$30,597	1,442	36%
Nuclear Medicine Technologists	\$75,962	91	13%
Radiologic Technologists	\$55,494	1,196	19%
Magnetic Resonance Imaging	\$68,661	217	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Health Occupation Students of America (HOSA) Work Based Learning
Activities:
Clinical rotations at a
community wellness

community wellness center, hospital, assisted living, nursing home

The Healthcare Diagnostics program of study introduces students to occupations and educational opportunities related to performing complex medical laboratory tests for the diagnosis, treatment, and prevention of disease. This program of study may also include exploration into the opportunities associated with blood laboratories as well as radiologic technology, and ultrasonic technology.



The Health Science Career Cluster® focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Health Science	13020200 (1 credit)	None	9-10
Medical Terminology	13020300 (1 credit)	None	9-12
Health Science Theory	13020400 (1 credit)	PREQ: Biology	10-12
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit	10-12
Practicum in Health Science	13020500 (2 credits)	PREQ: Health Science Theory and Biology	11-12

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

COURSES

Principles of Health Science



LEVEL 1

Medical Terminology



Anatomy and Physiology Health Science Theory



Medical Assistant (TBD)
Practicum in Health Science

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Medical Assistant	Dental Assistant	Dental H	ygienist	Dentist
Pharmacy Technician	Surgical Technologist			Physician Assistant
	Medical Assistant	Medical/ Clinical Assistant		Family and General Practitioners
	Pharmacy Aides			Pharmacist

HEALTHCARE THERAPEUTIC

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Medical Assistants	\$29,598	8,862	30%
Surgical Technologists	\$46, 310	1,150	21%
Dental Hygienists	\$73,507	1,353	38%
Physicians and Surgeons	\$213,071	1,151	30%
Dental Assistants	\$34,840	4,422	31%

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: SkillsUSA Health Occupation Students of America (HOSA) Work Based Learning Activities:

Volunteer at a community wellness center, hospital, assisted living, or nursing home.

The Healthcare Therapeutic program of study introduces students to occupations and educational opportunities related to diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study also includes an introduction to the opportunities associated with providing treatment and counsel to patients as well as rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.



The Health Science Career Cluster® focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Health Science	13020200 (1 credit)	None	9-10
Medical Terminology	13020300 (1 credit)	None	9-12
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit	10-12
Health Science Theory	13020400 (1 credit)	PREQ: Biology	10-12
Medical Assistant (TBD)	TBD	TBD	11-12
Practicum in Health Science	13020500 (2 credits)	PREQ: Health Science Theory and Biology	11-12

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

COURSES

Principles of Health Science

LEVEL 2

LEVEL 1

Medical Terminology

LEVEL 3

Anatomy and Physiology

LEVEL 4

Practicum in Nursing (TBD)

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Nurse Aide/ Assistant	Licensed Vocational Nurse	Registered Nursing/ Registered Nurse	Informatics Nurse Specialists	Nurse Practitioner
				Nursing Administration
				Nurse Anesthesist

NURSING

SCIENCE

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Licensed Vocational Nurses	\$45,178	7,186	21%
Registered Nurses	\$68,682	17,493	26%
Nurse Practitioners	\$107,827	977	50%
Informatics Nurse Specialists	\$88,270	4,610	15%
Nurse Anethesists	\$154,856	357	23%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Health Occupation Students of America (HOSA) Work Based Learning Activities:

Volunteer at a community wellness center, hospital, assisted living center, or nursing home.

The Nursing Program of Study introduces students to knowledge and skills related to patient care. CTE concentrators may learn about or practice caring for patients, routine procedures such as monitoring vital signs, development and implementation of care plans, maintenance of medical records, and disease or pain management. Students may focus on the healthcare system and research system designs and make recommended modifications.



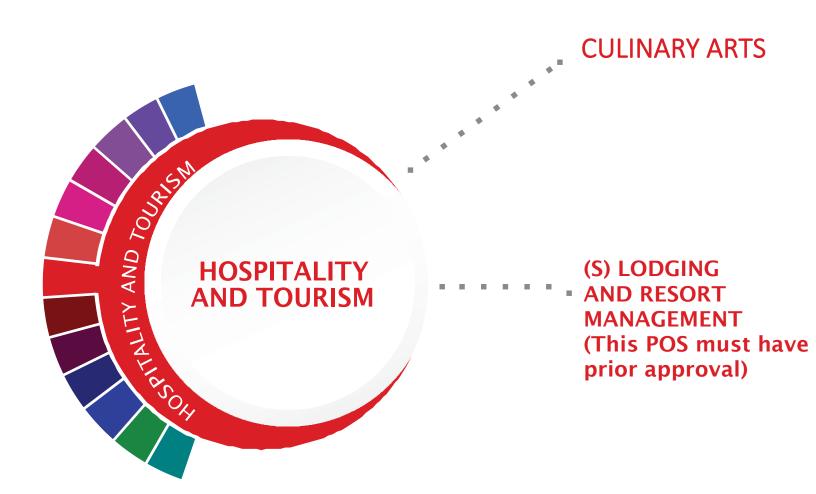
The Health Science Career Cluster® focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Health Science	13020200 (1 credit)	None	9-10
Medical Terminology	13020300 (1 credit)	None	9-12
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit	10-12
Practicum in Nursing	TBD	TBD	11-12

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

BUSINESS & INDUSTRY ENDORSEMENTS



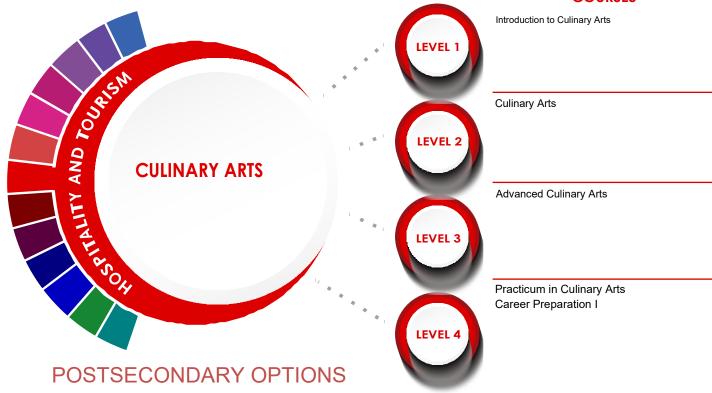
Local Implementation Considerations:

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COURSES



HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
ServSafe Manager	Certified Chef	Hotel and Restaurant Management		nagement
	Foodservice Management Professional	Restaurant Culinary and Catering Management	Food Serv Administration	ice Systems /Management
	Comprehensive Food Safety	Hospitality Ad	lministration/Mana	gement, General
	Certified Food and Beverage Executive	Culinary Arts/ Chef Training	Culinary Science and Food Service Management	Business Administration Management, General

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Food Service Managers	\$55,619	1,561	28%
Chef and Head Cooks	\$43,285	1,366	25%
Food Science Technicians	\$34,382	236	11%
Food and Beverage Managers	\$55,619	1,561	28%

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Family, Career, Community Leaders of America (FCCLA), SkillsUSA, American Culinary Federation Texas Restaurant Association

Work Based Learning Activities: Plan a catering event or work for a catering company; participate in a cooking course; work in a restaurant; cook at home

The Culinary Arts program of study introduces students to occupations and educational opportunities related to the planning, directing, or coordinating activities of a food and beverage organization or department. This program of study also explores opportunities involved in directing and participating in the preparation and cooking of food.



The Hospitality and Tourism Career Cluster® focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services. Students acquire knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Introduction to Culinary Arts	13022550 (1 credit)	None	9-12
Culinary Arts	13022600 (2 credits)	None	10-12
Advanced Culinary Arts	13022650 (2 credits)	PREQ: Culinary Arts	10-12
Practicum in Culinary Arts	13022700 (2 credits)	PREQ: Culinary Arts	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE HOSPITALITY AND TOURISM CAREER CLUSTER, PLEASE CONTACT:

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COURSES

Principles of Hospitality and Tourism

Hospitality Services (Advanced Level)

Practicum in Hospitality Services I

Practicum in Hospitality Services II

LEVEL 2

LEVEL 3

LEVEL 4

LEVEL 1

LODGING AND RESORT MANAGEMENT (Requires prior approval)

POSTSECONDARY OPTIONS

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
ServSafe Food Handler	Certified Hospitality Supervisor	Hotel/Motel Administration/M anagement	Administration	oitality n/Management, neral
	Certified Hotel Administrator	Business Admir	nistration and Mana	gement, General
	Certification in Hotel Industry Analytics	Tourism and Travel Services Management	Hotel and Restaurant Management	Hospitality Administration
	Certified Guest Service Professional	Business Administration and Management	Marketing/Mana	agement, General

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
General and Operations Managers	\$107,640	18,679	20%
Lodging Managers	\$48,381	396	19%
Administrative Services Managers	\$96,138	2,277	21%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Family, Career, and Community Leaders of America (FCCLA), American Hotel and Lodging Association Work Based Learning Activities: Intern at a resort or lodging property; work at a hotel, summer camp or theme park;

The Lodging and Resort Management program of study introduces students to occupations and educational opportunities related to the logistical and operational management of lodging and resorts. This program of study also explores opportunities related to human resources, financial analysis, and marketing.



The Hospitality and Tourism Career Cluster® focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Hospitality and Tourism	13022200 (1 credit)	None	9-12
Hospitality Services	13022800 (2 credits)	None	10-12
Practicum in Hospitality Services I	13022900 (2 credits)	None	11-12
Practicum in Hospitality Services II	13022910 (2 credits)	PREQ: Practicum in Hospitality Services I	11-12

FOR ADDITIONAL INFORMATION ON THE HOSPITALITY AND TOURISM CAREER CLUSTER, PLEASE CONTACT:

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PUBLIC SERVICE ENDORSEMENT



FAMILY AND
COMMUNITY
SERVICES

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COURSE

Principles of Human Services



Lifetime Nutrition and Wellness/Dollars and Sense Child Development

Counseling and Mental Health (NEW)

Practicum in Human Services
Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Certified Associate in Project Management	Human Development and Family Studies	Human D	evelopment and Fa	amily Studies
Community Health Worker	CommunityHealth Services/ Liaison/ Counseling	Human Services/Sciences, General		Marriage and Family Therapy/ Counseling
	Distance Credentialed Counselor	Family and Co	nsumer Sciences	Human Services/ Sciences
	Educator Certification in Family and Consumer Sciences	Community Health Services	Child and Family Services	Family Studies

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Child, Family, and School Social Workers	\$41,350	2,221	17%
Social and Community Services Managers	\$65,146	608	33%
Marriage and Family Therapists	\$42,266	217	35%
Social and Human Service Assistants	\$32,448	2,822	25%
Mental Health and Substance Abuse and Behavioral Disorder Counselors	\$42,120	576	39%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: American Association of Family and Consumer Sciences, Family, Career and Community Leaders of America

Work Based Learning Activities:

Volunteer at a community center; intern for a community non-profit organization

The Family and Community Services program of study introduces students to knowledge and skills related to social services, including child and human development and consumer sciences. CTE concentrators may learn about or practice managing social and community services or teaching family and consumer sciences. Students may follow career paths in social work or therapy for children, families, or school communities.



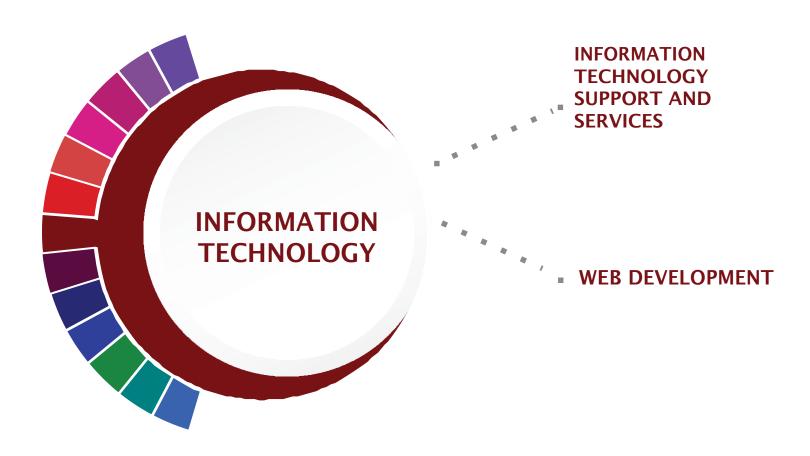
The Human Services Career Cluster® focuses on preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care services, and consumer services.

COURSE NAME	SERVICE ID	PREREQUISITE (PREQ) COREQUISITE (CREQ)	GRADE
Principles of Human Services	13024200 (1 credit)	None	9-12
Child Development	13024700 (1 credit)	None	10-12
Lifetime Nutrition and Wellness	13024500 (.5 credit)	None	10-12
Dollars and Sense	13024300 (.5 credit)	None	10-12
Counseling and Mental Health	13024600 (1 credit)	None	11-12
Practicum in Human Services	13025000 (2 credits)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE HUMAN SERVICES CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

BUSINESS & INDUSTRY ENDORSEMENTS



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COURSES Principles of Information Technology

INFORMATION **TECHNOLOGY SUPPORT AND SERVICES**

Computer Maintenance/Lab

Computer Technician Practicum

LEVEL 4

LEVEL 3

LEVEL 1

LEVEL 2

Computer Technician Practicum (2nd time) Practicum of Information Technology Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S Degree	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE	
Microsoft Technology Associate Windows Operating System Fundamentals	IBM Certified Specialist - InfoSphere Optim for Distributed Systems Fundamentals	Computer a	nd Information Sci	ences, General	
CompTIA A+	IBM Certified DatabaseAssociate- DB211Fundamentals for z/OS	Computer and Information Systems Security/Information Assurance		Computer Systems Analysis/ Analyst	
	HP ASE - ProLiant Server Solutions Integrator V2	Information Technology	Computer Eng	ineering, General	
	Oracle Linux 6 Advanced System Administration		ns Networking and munications	Information Technology	
Additional	Additional industry based certification information is available from the TEA CTE website				

For more information on postsecondary options for this program of study, visit

TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Database Administrator	\$83,075	1,063	19%
Information Technology - Computer Occupations, All Other	\$85,197	1,616	20%
Computer Hardware Engineer	\$111,738	343	24%
Computer System Analyst and Support	\$87,568	5,937	29%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:

Worked Based Learning

Job shadow a database

Activities :

administrator or computer

Obtain a Certification

The Information Technology Support and Services program of study explores the occupations and educational opportunities associated with administering, testing, and implementing computer databases and applying knowledge of database management systems. This program of study may also include analyzing user requirements and problems to automate or improve existing systems and review computer system capabilities. This program of study may also include exploration into the research, design, or testing of computer or computer-related equipment for commercial industrial military or scientific use

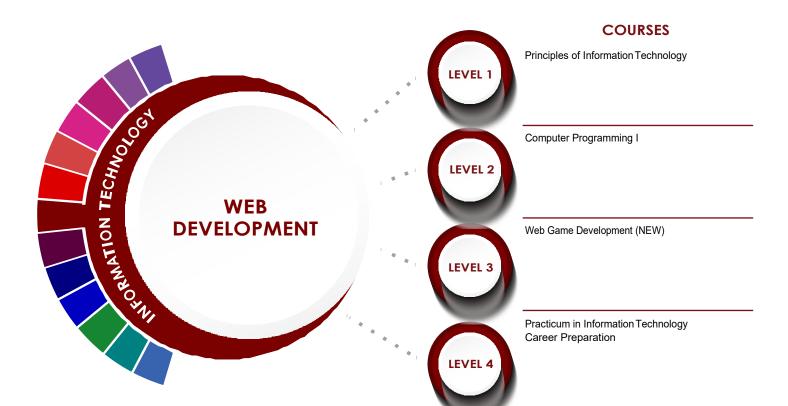
The Information Technology (IT) Career Cluster® focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITE (PREQ) COREQUISITE (CREQ)	GRADE
Principles of Information Technology	13027200 (1 credit)	None	9-10
Computer Maintenance/ Lab	13027300 (1 credit) 13027310 (2 credits)	None	10-12
Computer Technician Practicum	13027500 (2 credits)	None	10-12
Computer Technician Practicum (2nd time)	13027510 (2 credits) 13027515 (3 credits)	PREQ: Computer Technician Practicum	12
Practicum in Information Technology	13028000 (2 credits)	PREQ: A minimum of two high school information technology (IT) courses	12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE THE INFORMATION TECHNOLOGY CAREER CLUSTER, PLEASE CONTACT:

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HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Microsoft Technology Associate Introduction to Programming	AEM 6 Developer	Computer Programming/Pro grammer, General	Web/ Multimedia Management and Webmaster	Computational Science
App Development with Swift Certification Level 1	Certified Webmaster Professional	Computer Science		
	Adobe Campaign Developer			Information Science/ Studies
	IBM Certified Solution Developer - OpenSocial	Computer Systems Networking and Telecommunications		•

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Computer Network Architects	\$111,633	1,079	39%
Web Administrators, Computer Occupations	\$85,197	1,616	20%
WORK BASEI LEARN	LEARNING IING OPPO		NDED
Exploration Activities: Join a coding or compute		reer Prepara	

Certification

programming club Create a web page

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

The Web Development program of study explores the occupations and educational opportunities associated with designing, creating, and modifying websites. This program of study may also explore integrating websites with other computer applications, and converting written, graphic, audio, and video components to compatible web formats by using software designed to facilitate the creation of web and multimedia content.

The Information Technology (IT) Career Cluster® focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITE (PREQ) COREQUISITE (CREQ) RECOMMENDED PREREQUISITES (RPREQ) RECOMMENDED COREQUISITE (CPREQ)	GRADE
Principles of Information Technology	13027200 (1 Credit)	PREQ: None	9-10
Computer Programming I	13027600 (1 Credit)	RPREQ: Principles of Information Technology and Algebra I	10-12
Web Game Development	03580830 (1 Credit)	None	
Practicum in Information Technology	13028000 (2 Credits)	(PREQ): A minimum of two high school information technology (IT) courses	12
Career Preparation I	12701300 (2 Credits) 12701305 (3 Credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE THE INFORMATION TECHNOLOGY CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

PUBLIC SERVICE ENDORSEMENTS



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COURSES

Principles of Law, Public Safety, Corrections, and Security



Counseling and Mental Health (NEW)



Firefighter I Anatomy and Physiology



Emergency Medical Technician - Basic (Innovative Course - Board Approved)

Practicum in Law, Public Safety, Corrections, and Security

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
0 ,	dical Technician - sic	Technology	cy Medical /Technician ramedic)	
Basic Structure Fire Protection Certification	Fire Protection Personnel/ Firefighter	Fire Prevention and Safety Technology/ Technician	Natural Resources Law Enforcement and Protective Services	
	Fire Protection System Contractor	Fire Science/ Fire-fighting		
	Fire Inspector			
Additional	industry based cortifi	ication information is	available from the T	EA CTE webeite

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Firefighters	\$50,149	2,309	13%
Fire Inspectors and Investigators	\$54,787	161	14%
Emergency Medical Technicians	\$34,091	1,880	31%

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Attend local emergency awareness events; Texas Public Service Association Work Based Learning Activities:

Volunteer at a hospital or a fire station

The Emergency Services program of study focuses on training students to respond to lemergency situations, namely medical emergencies and fire-based emergencies. Students may learn how to prevent emergencies, respond appropriately and in accordance with rules and regulations during crises, and investigate and delineate the source of the emergency.

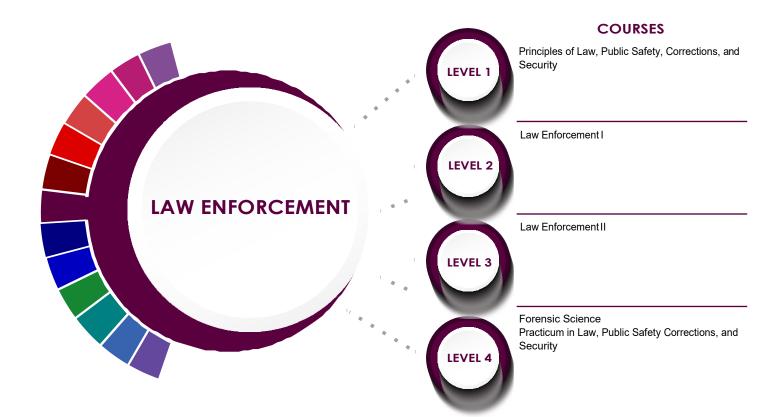


The Law and Public Service Career Cluster® focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	9-12
Counseling and Mental Health	13024600 (1 credit)	None	9-12
Firefighter I	13029900 (2 credits)	None	10-12
Emergency Medical Technician - Basic	N1303015 (2 credits)	PREQ: Biology	11-12
Anatomy and Physiology	13020600 (1 credit)	PREQ: Biology and a second science credit;	10-12
Practicum in Law, Public Safety, Corrections, and Security	13030100 (2 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER, PLEASE CONTACT:

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HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
	Law Enforcement Officer	Criminal Justic	e/Safety Studies/La Administration	w Enforcement
	Private Investigator/ Security Guard	Criminal Justice/ Police Science		
	Code Enforcement Officer	Corrections	Juvenile Corrections	
	Certified Law Enforcement Planner	Criminalistics and Criminal Science	Cyber/ Computer Forensics and Counterterrorism	Natural Resources Law Enforcement and Protective Servies

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org. $\ \ \, = \ \, (1-1)^{-1} \, ($

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Police and Sheriff's Patrol Officers	\$60,112	5,241	13%
Probation Officers and Correctional Treatment Officers	\$44,054	793	9%
Correctional Officers and Jailers	\$40,186	4,683	9%
Immigration and Customs Inspectors	\$78,104	1,236	9%
First-Line Supervisors of Police and Detectives	\$91,312	253	25%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Texas Public Service Association; criminal justice clubs Work Based Learning Activities: Attend court hearings and

other legal procedures.

The Law Enforcement program of study teaches students about the development of, adherence to, and protection of various branches of law. Students may learn how to appropriately and legally respond to breaches in the law according to statutory rules and regulations as well as investigate how and why the breaches occurred.



The Law and Public Service Career Cluster® focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	9-12
Law Enforcement I	13029300 (1 credit)	None	10-12
Law Enforcement II	13029400 (1 credit)	Law Enforcement I	11-12
Forensic Science	13029500 (1 credit)	PREQ: Biology and Chemistry	11-12
Practicum in Law, Public Safety, Corrections, and Security	13030100 (2 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER, PLEASE CONTACT:

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BUSINESS & INDUSTRY ENDORSEMENT

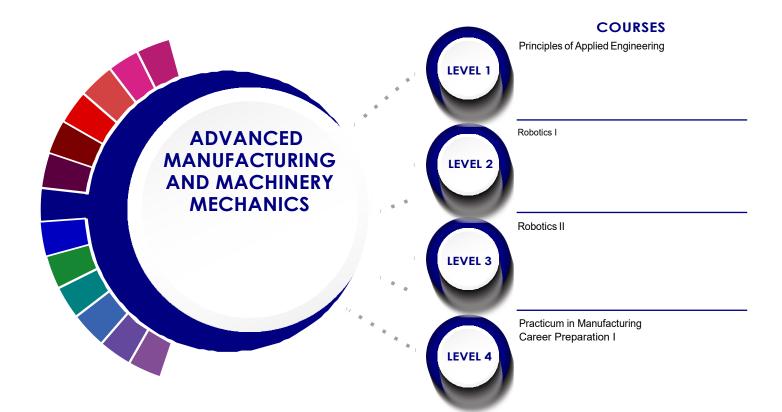


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HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
FANUC Robot Operator 1	Engineer, Professional	Electro- mechanical Engineering/ Technology	Electrical	Engineering
Mastercam Associate Level Certification	PMMI Mechatronics: Programmable Logic Controllers 1	Robotics Technology/ Technician	Engineeri	ing, General
	Certified Quality Technician	Instrumentation Technology/ Technician	Industrial	Engineering
	Plant Maintenance Technologist	Industrial Mechanics and Maintenance Technology	Mechanica	ll Engineering

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Electro- Mechanical Assemblers	\$30,160	951	9%
Electro- Mechanical Technicians	\$56,555	127	9%
Industrial Machinery Mechanics	\$49,816	3,788	27%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Participate in SkillsUSA and local STEM events Work Based Learning Activities:

Apprenticeship at a local business or industry American Welding Society

The Advanced Manufacturing and Machinery Mechanics program of study focuses on the assembly, operation, maintenance, and repair of electromechanical equipment or devices. Students may work in a variety of mechanical fields, gaining knowledge and experience in robotics, refinery and pipeline systems, deep ocean exploration, or hazardous waste removal. CTE concentrators may work in a variety of fields of engineering.



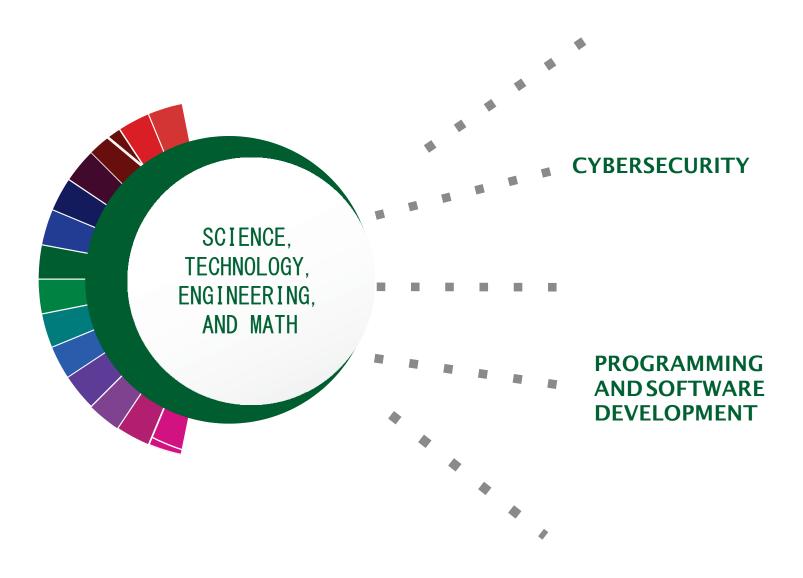
The Manufacturing Career Cluster® focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Applied Engineering	13036200 (1 credit)	None	9-10
Robotics I	13037000 (1 credit)	None	9-10
Robotics II	13037050 (1 credit)	PREQ: Robotics I	10-12
Practicum in Manufacturing	13033000 (2 credits)	None	12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE MANUFACTURING CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

STEM ENDORSEMENTS

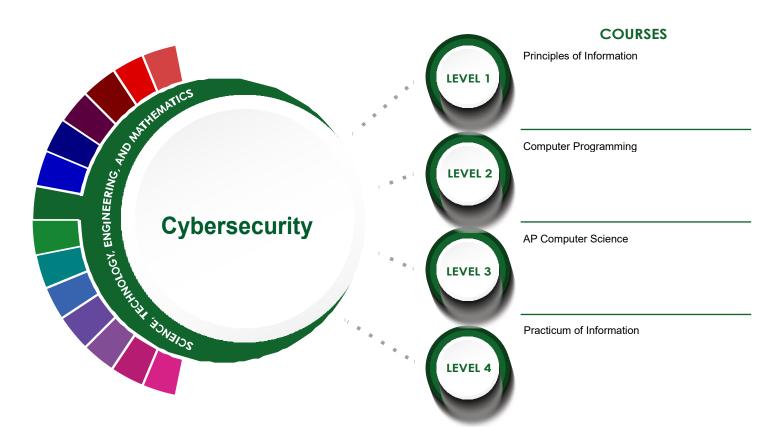


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HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE	
Oracle Certified Associate Java SE 8	GIAC Reverse Engineering Malware	System Networking, and LAN/WAN Management	Computer Systems Networking and Telecommunications	Computer Systems Analysis/Analys t	
	Certified Advanced Windows Forensic Examiner	Information Technology	Computer Systems Networking and Telecommunications	Information Technology	
SAP Certified Technology Professional System Security Architect Computer and Information Sciences, General					
Cisco Certified Computer Science Network Professional Security Certification					
Additional industry based certification information is available from the TEA CTE Website					
Additional industry based certification information is available from the TEA CTE Website					

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Information Security Analysts	\$91,915	814	29%
Network and Computer System Administrators	\$82,597	2,814	19%
Computer Systems Analyst	\$87,568	5,937	29%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities: Work Based Learning Activities:

Job shadow a Obtain an industry

system analyst or information

certification.

The Cybersecurity program of study includes the occupations and educational opportunities related to planning, implementing, upgrading, or monitoring security measure for the protection of computer networks and information. This program of study may also include exploration into responding to computer security breaches and virus and administering network security measures.



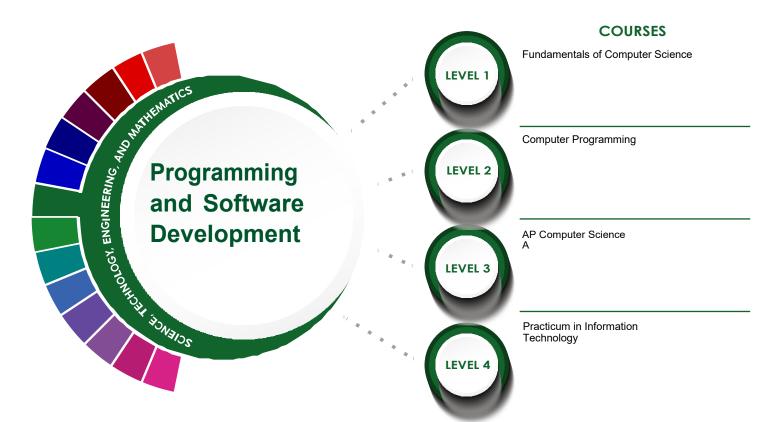
The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Information Technology	13027200 (1 credit)	None	9-10
Computer Programming I	13027600 (1 credit)	RPREQ: Principles of Information Technology and Algebra I	10-12
AP Computer Science A	A3580110 (1 credit) A3580120 (1 credit)	None	10-12
Practicum in Information Technology	13028000 (2 credit) 13028005 (3 credit)	RPREQ: a minimum of two high school information technology courses	12

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net



HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE	
MTA Intro to Programmin g Using Java	Certified Computing Profession al	Computer Programming/Pr o grammer General	Mangement Information Systems, General		
	Cloud Technology Associate Certification	Computer Software Engineer			
	AEM 6 Developer	Computer Science			
	Certifed Software Analyst	Information Science/Studies			
*Includes Level I and Level II Certificates					
For more inform	·	condary options fo	. 0	of study, visit	

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	
Computer	\$111, 633	1,454	9%
Network Architect			
Software	\$103, 334	2985	25 %
Developer, Systems Software			
WORK BASE LEAR	D LEARNING NING OPPO		ANDED
Exploration Activ	/ITIES.	ork Based Lec tivities:	ırning

Join a coding or computer Obtain an industry

based

The programming and Software Development program of study explores the occupations and education opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer applications to run



The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

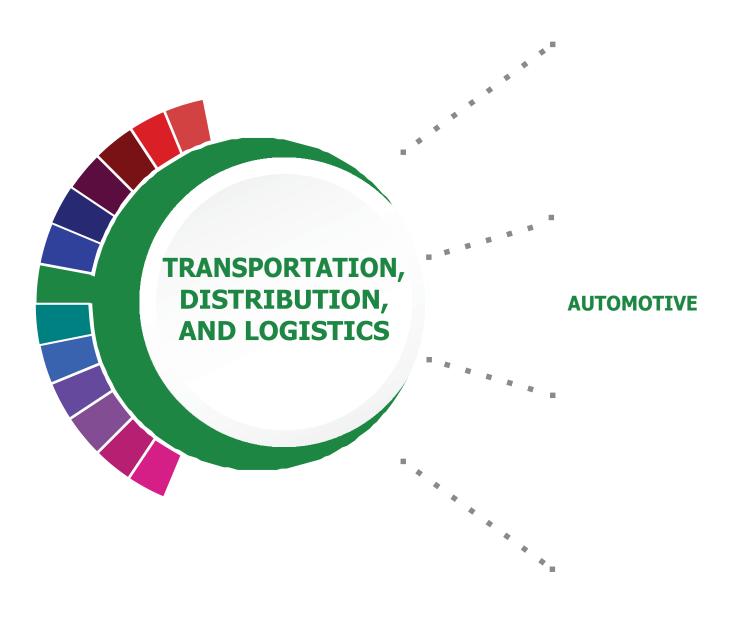
COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Fundamentals of Computer Science	03580140 (1 credit)	None	9-12
Computer Programming I	13027600 (1 credit)	RPREQ: Principles of Information Technology and Algebra I	10-12
Computer Programming II	13027700 (1 credit)	RPREQ: Principles of Information Technology and Computer Programming I	11-12
Practicum of Information Technology	13028000 (2 credit)	RPREQ: a minimum of two high school information technology courses	12
Career Preparation I	12701300 (2 credit) 12701305 (3 credit)	None	11-12

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BUSINESS & INDUSTRY ENDORSEMENT



Local Implementation Considerations:

Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



AUTOMOTIVE AUTOMOTIVE Automotive Technology I (Advanced Level) LEVEL 2 Automotive Technology II Automotive Technology II LEVEL 3 Practicum in Transportation Systems Career Preparation I

CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Master Collision Repair and Refinishing Technician	Autobody/ Collision and Repair Technology/ Technician		Mechanical Engineering
Automobile Technician: various systems and parts	Medium/ Heavy Vehicle and Truck Technology/ Technician		
Engine Machinist Technician	Mechanical [*]	Technology/	
Collision Repair and Refinish			
	Master Collision Repair and Refinishing Technician Automobile Technician: various systems and parts Engine Machinist Technician Collision Repair and	Master Collision Repair and Refinishing Technician Automobile Technician: various systems and parts Engine Machinist Technician Collision Repair Medium/ Heavy Vehicle and Truck Technology/ Technician Mechanical Mechanical Mechanical Technician	Master Collision Repair and Refinishing Technician Automobile Technician: various systems and parts Engine Machinist Technician Mechanical Engineering/ Mechanical Technology/ Technician Mechanical Engineering/ Mechanical Technology/ Technician Mechanical Technology/ Technician Collision Repair and

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH		
Automotive Body and Related Repairers	\$40,144	1,456	25%		
Automotive Service Technician and Mechanics	\$38,459	208	25%		
WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES					
Exploration Activiti SkillsUSA competition		rk Based Lea ivities:	rning		

Automotive Service

Association

Work at a local automotive repair or body shop.

The Automotive program of study teaches students how to repair and refinish automobiles and service various types of vehicles. Students may learn to collect payment for services or supplies and perform typical vehicle maintenance procedures such as lubrication, oil changes, installation of antifreeze, or replacement of accessories like wiper blades or tires.



The Transportation, Distribution, and Logistics Career Cluster® focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Automotive Basics	13039550 (1 credit)	None	9-12
Automotive Technology I: Maintenance and Light Repair	13039600 (2 credits)	None	9-12
Automotive Technology II	13039700 (2 credits)	PREQ: Automotive Technology I: Maintenance and Light Repair	11-12
Practicum in Transportation Systems	13040450 (2 credits) 13040455 (3 credits)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION, AND LOGISTICS CAREER CLUSTER, PLEASE CONTACT:

Jenny Arledge | jarledge@ssisd.net

Course Selection Guide Worksheet

Use this worksheet to select courses for your Foundation High School Plan with Endorsement:

	9 th Grade	10 th Grade	11 th Grade	12 th Grade
English Language Arts 4 Credits	☐ English I PSP☐ English I CP	☐ English II PSP☐ English II CP	☐ English III PSP☐ English III CP☐ English III AP	☐ English IV PSP ☐ English IV CP ☐ English IV Dual Credit ☐ English IV AP
Mathematics 4 Credits Algebra II satisfies requirement for Distinguished Level of Achievement	☐ Algebra I PSP For students who earned Algebra I credit in 8 th grade: ☐ Geometry PSP (Prerequisite: Algebra I) ☐ Geometry CP (Prerequisite: Algebra I)	Geometry PSP Geometry CP Algebra II PSP (Prerequisite Geometry) Algebra II CP (Prerequisite	Algebra II PSP Algebra II CP Accounting II Robotics II Financial Mathematics Pre-Calculus PSP (Prerequisite Algebra II) Pre-Calculus CP (Prerequisite Algebra II)	Algebra II PSP Algebra II CP Pre-Calculus PSP Pre-Calculus CP AP Computer Science AP Calculus Statistics PSP AP Statistics College Algebra/College Statistics
Science 4 Credits	☐ Integrated Physics & Chemistry PSP Best for students who earned Algebra I credit in 8 th grade: ☐ Biology PSP (Prerequisite Algebra I) ☐ Biology CP (Prerequisite Algebra I)	Geometry) Biology PSP Biology CP Chemistry PSP (Prerequisite Biology) Chemistry CP (Prerequisite Biology)	Chemistry PSP Chemistry CP AP Chemistry (Prerequisite Chemistry PSP or CP) Physics PSP (Prerequisite Chemistry) Physics CP (Prerequisite Chemistry) Concurrent Biology	Physics PSP Physics CP Advanced Animal Science Advanced Plant & Soil Anatomy & Physiology CP AP Biology AP Chemistry Concurrent Biology Forensic Science Astronomy

	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Social Studies 4 Credits	☐ World Geography PSP ☐ World Geography CP	☐ World History PSP ☐ World History CP ☐ AP World History	☐ U.S. History PSP ☐ U.S. History CP ☐ AP U.S. History ☐ Dual Credit U.S. History	U.S. Government PSP (1/2) U.S. Government CP (1/2) Dual Credit U.S. Government (1/2) AND Economics PSP (1/2) Economics CP (1/2) Dual Credit Economics (1/2)
Foreign Language 2 Credits Fine Arts 1 Credit Personal Health & Finance 1 Credit	Foreign Language I Credit Spanish I PSP Spanish I CP OR French I PSP French I CP Foreign Language credits may also be taken in the 10 th and 11 th grade years instead of 9 th and 10 th grade years.	Foreign Language II Credit Spanish II PSP Spanish II CP OR French II PSP French II CP	Fine Art Credit (can take any year) Art I Concert Band (2 years req.) Choir Dance I Music History Floral Design Stage Band – Jazz Strings Theatre Arts I	Personal Health & Finance Credit Lifetime Nutrition & Wellness (1/2) AND Dollars & Sense (1/2) These credits may also be taken in the 11 th or 12 th grade year.
Physical Education 1 Credit Technology 1 Credit Electives 2 Credits	Physical Education Credit Athletic Trainer Marching Band (2 years req.) Cheerleading PE Pre-Drill Athletics	Technology Credit Business Information Management I Computer Programming Digital Media Graphic Design Video Production I	Choice of Elective 1 Credit	Choice of Elective 1 Credit
Endorsement Sequence 4-7 Credits	Endorsement Course 1	Endorsement Course 2	Endorsement Course 3	Endorsement Course 4
Elective Options	Elective Option	Elective Option	Elective Option	Elective Option
Total Credits 32	8 Credits	8 Credits	8 Credits	8 Credits