EVERMAN ISD CAREER & TECHNICAL EDUCATION
CAREER Program of Study CHART
2020-2021 SCHOOL YEAR

Science, Technology, Engineering & Mathematics

Career Cluster: Business & Industry or STEM

Career Program of Study:

Information Technology Support and Services

JUNIOR HIGH	
College and Career Readiness	
Exploring STEM	
HIGH SCHOOL	
EXPLORER COURSES: Choose one or more of the following courses.	
Principles of Information Technology Support & Services *	
Business Information Management I+	
CONCENTRATOR COURSES: **To be a concentrator, you must pass one of the following AND one explorer course.**	
Computer Maintenance & Lab*	Business Information Management II +
COMPLETER COURSES: To be a completer, you must pass enough courses to earn 3.0 credits in this Program of Study	
Computer Technician Practicum*	Career Prep+
Extended Computer Technician Practicum*	
POSTSECONDARY:	
Texas Higher Education Coordinating Board	Apply for College
Trade Schools	

*Required to Complete the POS and test for Cisco Certified Entry Networking Technician +Recommended

HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING

There are several options for education and training beyond high school, depending on your career goals.

High School Certifications	2- Year Associates or Tech. Degree	4- Year Bachelor's Degree
• Microsoft Technology Associate Windows Operating System Fundamentals • OSHA 30	• computer and Infomation Sciences, General • Information Technology	• Computer and Information Systems Security/Information Assurance • Computer Engineering, General

LEARN MORE ABOUT OCCUPATION AND WAGES

Texas CTE Cybersecurity:
Information Technology Support & Services

SkillsUSA Is the Career & Technical Student Organization (CTSO) for students in the Cybersecurity POS SkillsUSA

Information Technology Support and Services

Students who have chosen Information Technology Support and Services will complete the following courses and earn a STEM Endorsement.

9th Grade: Principles of Information Technology Support and Services (1 credit)

In Infomation Technolgy principles, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

10th Grade: Computer Maintenance and Lab (2 credits)

In Computer Maintenance Lab, students will acquire knowledge of computer maintenance and creating appropriate documentation. Students will analyze business and industry's social responsibility regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and the workplace related to computer maintenance. Students will apply technical skills to address the IT industry and emerging technologies. Districts are encouraged to offer this course in a consecutive block with a computer maintenance lab to allow students sufficient time o master both courses' content.

11th Grade: Computer Technician Practicum (2 credits)

In Computer Technician Practicum, students will gain knowledge and skills in computer technologies, including the advanced electrical and electronic theory, computer principles, and components related to the installation, diagnosis, services, and repair of computer-based technology systems. Students will reinforce, apply, and transfer their knowledge and skills to a variety of setting problems. Proper use of analytical skills and applying IT concepts and standards are essential to prepare students for success in a technology-driven environment. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an instructor, industry mentor, or both.

12th Grade: Computer Technician Practicum 2nd time taken (1 credit)

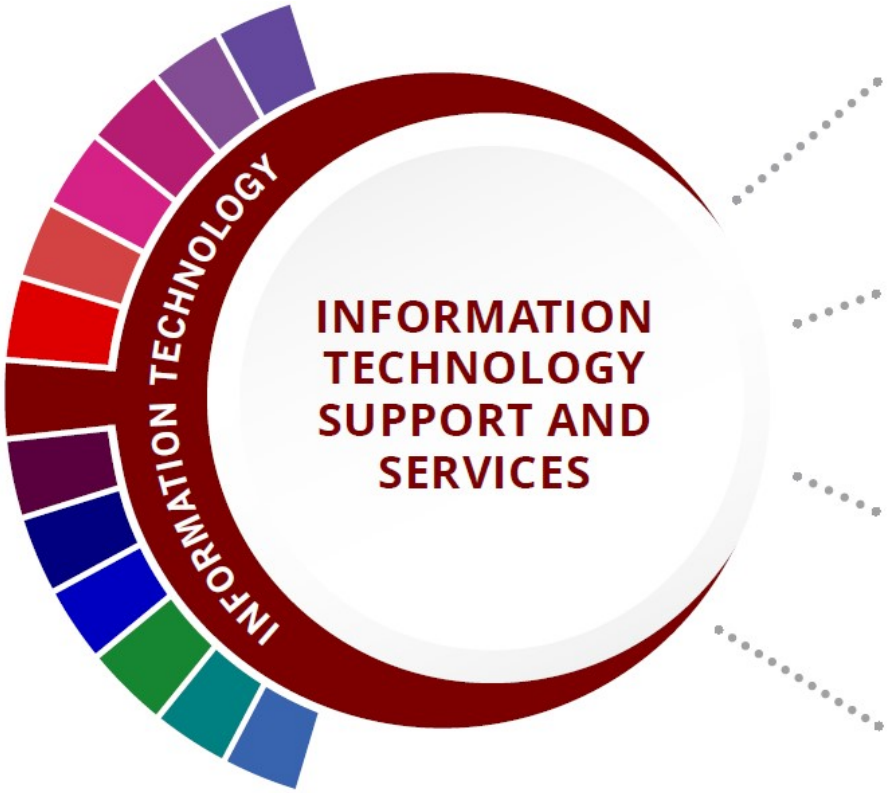
Students will gain knowledge and skills in computer technologies in the Extended Computer Practicum, including the advanced electrical and electronic theory, computer principles, and components related to the installation, diagnosis service, and repair of computer-based technology systems. Students will reinforce, apply, and transfer their knowledge and skills to various settings and problems. Proper analytical skills and IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be

conducted in a classroom setting with an instructor, Industry mentor, or both. Students will be awarded one credit for completing this course.

Students will be able to earn the following industry-based certifications:
Microsoft Technology Associate Windows Operating System Fundamentals.

For more information on post-secondary options, please click the link below.

Information Technolgy Support and Services



Level 1	Principles of Information Technology Geographic Information Systems
Level 2	Computer Maintenance/Lab Raster Based GIS
Level 3	Computer Technician Practicum Spatial Technology and Remote Sensing IT Troubleshooting (TBD)
Level 4	Computer Technician Practicum (2nd time) Practicum of Information Technology Practicum in Entrepreneurship (TBD) Intendent Study in Technology Applications Independent Study in Evolving/Emerging Technologies Project-Based Research 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 and Information Sciences, General	Computer and Information Sciences, General	Computer and Information Sciences, General
ERSI ArcGIS Desktop Entry	IBM Certified Database Associate - DB2 11 Fundamentals for z/OS	Computer and Information Systems Security/ Information Assurance	Computer and Information Systems Security /Information Assurance	Computer Systems Analysis/ Analyst
CompTIA A+	HP ASE - ProLiant Server Solutions Integrator V2	Information Technology	Computer Engineering, General	Computer Engineering, General
CompTIA IT Fundamentals +	Oracle Linux 6 Advanced System Administration	Computer Systems Networking and Tele-communications	Computer Systems Networking and Tele-communications	Information Technology

Additional industry-based certification information is available on 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%
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:	Work Based Learning Activities:
Join TSA Job shadow a database administrator or computer hardware engineer	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.

Successful completion of the Information Technology Support and Services program of study will fulfill requirements of the Business and Industry endorsement or STEM endorsement if the math and science requirements are met.

Revised - July 2020

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITS (PREQ) COREQUISITES (CREQ)	Grade
Principles of Information Technology	13027200 (1 credit)	None	9-10
Geographic Information Systems	N1302805 (1 credit)	None	10-12
Computer Maintenance/Lab	13027300 (1 credit) 13027310 (2 credits)	None	10-12
Raster Based GIS	N1302806 (1 credit)	None	10-12
Computer Technician Practicum	13027500 (2 credits) 13027505 (3 credits)	None	10-12
Spatial Technology and Remote Sensing	N1302807 (1 credit)	None	10-12
IT Troubleshooting	TBD	TBD	TBD
Computer Technician Practicum (2nd time)	13027510 (2 credits) 13027515 (3 credits)	PREQ: Computer Technician Practicum	12
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits) 13028010 (2 credits) 13028015 (3 credits)	PREQ: A minimum of two high school information technology (IT) courses	12
Practicum in Entrepreneurship	TBD	TBD	TBD
Independent Study in Technology Applications	03580900 (1 credit)	None	9-12
Independent Study in Evolving/Emerging Technologies	03581500 (1 credit)	None	9-12
Project-Based Research	12701500 (1 credit)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

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

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https://tea.texas.gov/cte