

# Information Technology Career Cluster

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.

## Information Technology Support and Services Statewide Program of Study



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.

### Secondary Courses for High School Credit

#### 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
- Intendent Study in Technology Applications
- Independent Study in Evolving/Emerging Technologies
- Project-Based Research
- Career Preparation I

### Postsecondary Opportunities

#### Associates Degrees

- Computer and Information Sciences, General
- Computer and Information Systems Security/ Information Assurance
- Information Technology
- Computer Systems Networking and Telecommunications

#### Bachelor's Degrees

- Computer and Information Sciences, General
- Computer and Information Systems Security /Information Assurance
- Computer Engineering, General
- Computer Systems Networking and Telecommunications

#### Master's, Doctoral, and Professional Degrees

- Computer and Information Sciences, General
- Computer Systems Analysis/ Analyst
- Computer Engineering, General
- Information Technology

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA
- Job shadow a database administrator or computer hardware engineer

#### Work-Based Learning Activities

- Earn an IT certification

### Industry-Based Certifications

- Business Information Processing
- Cloud Essentials+
- CompTIA A+ Certification
- CompTIA IT Fundamentals+
- Computer Repair Technology - Job Ready
- Google IT Support Professional Certificate
- Microsoft Security, Compliance, and Identity Fundamentals
- Microsoft 365 Fundamentals
- ESRI ArcGIS Desktop Entry\*

\*IBC Sunsetting 8/31/24



### Aligned Occupations

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%

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 – August 2022

# Information Technology Support and Services

## Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Information Technology	13027200 (1 credit)	None	None
Geographic Information Systems	N1302805 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Maintenance/Lab	13027300 (1 credit) 13027310 (2 credits)	Principles of Information Technology	None
Raster Based GIS	N1302806 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Technician Practicum	13027500 (2 credits) 13027505 (3 credits)	None	None
Spatial Technology and Remote Sensing	N1302807 (1 credit)	None	None
IT Troubleshooting	N1302815 (1 credit)	None	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Technician Practicum (2nd Time)	13027510 (2 credits) 13027515 (3 credits)	Computer Technician Practicum	None
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits) 13028010 (2 credits) 13028015 (3 credits)	A minimum of two high school Information Technology (IT) courses	None
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None
Independent Study in Technology Applications	03580900 (1 credit)	None	None
Independent Study in Evolving/Emerging Technologies	03581500 (1 credit)	None	None
Project-Based Research	12701500 (1 credit)	None	None
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE INFORMATION TECHNOLOGY CAREER CLUSTER,  
PLEASE CONTACT: [CTE@tea.texas.gov](mailto:CTE@tea.texas.gov)  
<https://tea.texas.gov/cte>

# Information Technology Support and Services

[LEA name] does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: [title, address, telephone number, email.]

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).