Information Technology Career Cluster

The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts.

Statewide Program of Study: Information Technology Support and Services

The Information Technology Support and Services program of study focuses on occupational and educational opportunities associated with administering, testing, and implementing computer databases and applying knowledge of database management systems. This program of study includes analyzing user requirements, automating or improving existing systems, and reviewing computer system capabilities. It also includes research, design, and 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
Level 2	• Business Information Management I (BCIS1305*/POFI2301) • Computer Maintenance + Lab (ITSC1325/ ITSC1305)*
Level 3	• IT Troubleshooting
Level 4	• Practicum in Information Technology (ITSY1300/ITSY1342)*

Aligned Advanced Academic Courses

AP	AP Computer Science A
Dual Credit	BCIS1305 Business Computer Applications POFI2301 Microsoft Word ITSC1325 Personal Computer Hardware ITSC1305 Introduction to PC Operating Systems ITSY1300 Fundamentals of Information Security ITSY1342 Information Technology Security *TVCC's PC Support OSA

Students should be advised to consider these course opportunities to enrich their preparation. AP courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards concentrator/completer status for this program of study.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	• Intern at a local IT company to develop skills in computer system maintenance and setting up computer equipment • Shadow a database administrator or computer software or hardware engineer to learn about their day-to-day responsibilities
Expanded Learning Opportunities	• Participate in SkillsUSA or TSA • Subscribe to industry journals

Aligned Industry-Based Certifications

• CompTIA A+ Certification
• CompTIA IT Fundamentals+
• Google IT Support Professional Certificate

Example Postsecondary Opportunities

Apprenticeships
• Coding Apprenticeship

Associate Degrees
• Computer Science
• Network and System Administration

Bachelor's Degrees
• Computer and Information Systems Security/Auditing/Information Assurance
• Computer Engineering

Master's, Doctoral, and Professional Degrees
• Information Science/Studies
• Electrical and Electronics Engineering

Example Aligned Occupations

Computer User Support Specialists
Median Wage: $51,411
Annual Openings: 5,757
10-Year Growth: 21%

Computer Network Support Specialists
Median Wage: $65,646
Annual Openings: 1,634
10-Year Growth: 19%

Computer Hardware Engineers
Median Wage: $119,662
Annual Openings: 377
10-Year Growth: 14%

Successful completion of the Information Technology Support and Services program of study will fulfill requirements of the Business and Industry endorsement.

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.

For more information visit:
https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources

Information Technology Support and Services