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	• Computer Maintenance
Level 3	
Level 4	• Computer Technician Practicum • Practicum in Information Technology

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

Aligned Advanced Academic Courses

AP or IB	AP Computer Science A AP Computer Science Principles
Dual Credit	Dual credit offerings will vary by local education agency.

Students should be advised to consider these course opportunities to enrich their preparation. AP or IB 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

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%

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

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