

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.

CFISD Program of Study: Networking Systems

Successful completion of the Networking Systems program of study will fulfill requirements of the Business and Industry endorsement.

The Networking Systems program of study focuses on occupations and educational opportunities associated with designing and implementing computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. This program of study includes analysis of data processing challenges to implementing and improving computer systems.



Recommended Course Sequence (credits)(A=advanced)

Students wanting an endorsement in this area must select three (3) or more courses totaling four (4) or more credits with at least one being advanced.

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| Grade 9 | <ul style="list-style-type: none"> Principles of Computers & Coding (formerly Prin of Info Tech) (1-middle school only) Networking (1) |
| Grade 10 | <ul style="list-style-type: none"> Computer Science I K (1-LOTE) |
| Grade 11 | <ul style="list-style-type: none"> Internetworking Technologies I (Cisco) |
| Grade 12 | <ul style="list-style-type: none"> Internetworking Technologies II (Cisco) (A) |

Aligned Industry-Based Certifications Offered in CFISD

(course) (CCMR=impacts "career ready" status as outlined by the TEA Accountability System for College, Career or Military Readiness)

- CCST-Networking (Internetworking I) (not CCMR in this program of study)
- Cisco CCNA (200-301) Implementing and Administering Cisco Solutions (Internetworking Technologies I) (CCMR)
- CompTIA A+ Certification (Networking) (CCMR)
- CompTIA Network+ (Internetworking Technologies II) (CCMR)
- Information Technology Specialist: Networking (Internetworking Technologies I) (CCMR)
- Potential college credit via earning CompTIA A+ certification (Networking)

Aligned Advanced Academic Courses

Workforce Dual Credit See your counselor or dual credit materials for information on courses leading to a Networking/Cybersecurity Certificate/Degree.

Work-Based Learning and Expanded Learning Opportunities

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| Work-Based Learning Activities | <ul style="list-style-type: none"> Interview a network administrator to learn about their career path and what credentials they earned to be successful in their role |
| Expanded Learning Opportunities | <ul style="list-style-type: none"> Participate in SkillsUSA or TSA |

AVAILABLE TO STUDENTS AT ALL 12 HIGH SCHOOLS!

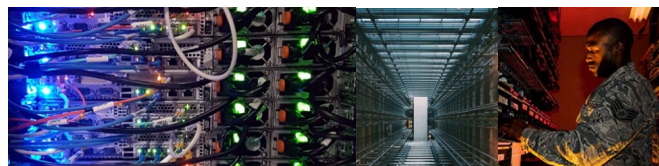
- Receive training on industry-standard material, software & equipment.
- Enhance your resume by earning recognized industry-based certifications.
- Get a jump-start by taking advantage of core curriculum dual credit, transferable to 2-yr and 4-yr degrees.

ALL AT A FRACTION OF THE COST!



For more information on this and other CTE programs of study offered in CFISD, visit <https://www.cfisd.net/academics/career-technical-education/programs-of-study>

What's next? For more information on related programs available to continue your studies at Lone Star College, visit <https://www.lonestar.edu/programs-of-study>



Example Postsecondary Opportunities

Apprenticeships

- Network Engineer Apprenticeship

Associate Degrees

- Computer Systems Networking and Telecommunications
- Network and System Administration

Bachelor's Degrees

- Computer and Information Sciences
- Information Technology

Master's, Doctoral, and Professional Degrees

- Computer Science
- Information Technology

Additional Stackable IBCs/License

- Aruba Certified Mobility Associate (ACMA)



Example Aligned Occupations

Data Source: Texas Wages, Texas Workforce Commission. rev 3/8/2024

Computer Network Support Specialists

Median Wage: \$63,738
Annual Openings: 1,018
10-Year Growth: 19%

Computer Systems Analysts

Median Wage: \$107,198
Annual Openings: 4,559
10-Year Growth: 19%

Network and Computer Systems Administrators

Median Wage: \$92,363
Annual Openings: 2,292
10-Year Growth: 20%