

# 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.

## Networking Systems Statewide Program of Study



The Networking Systems program of study explores the 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 may also include exploration into analyzing science, engineering, and other data processing problems to implement and improve computer systems.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Information Technology

#### Level 2

- Computer Maintenance/Lab  
(Personal Computer Hardware ITSC1325/Intro to PC Operating Systems ITSC1305)
- Business Information Management I (BCIS1305/POFI2301)

#### Level 3

- Networking/Lab  
(Network+ ITNW1358/Fundamentals of Networking Technologies ITNW1325)\*

#### Level 4

- Practicum of Information Technology  
(Fundamentals of Info Security ITSY1300/Info Tech Security ITSY1342)\*

\*TVCC Computer Science Network & Security OSA

### Postsecondary Opportunities

#### Associates Degrees

- Computer and Information Sciences, General
- Computer Systems Networking And Telecommunications
- Information Technology
- Network and System Administration/ Administrator

#### Bachelor's Degrees

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

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

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

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA
- Job shadow a computer network architect or support specialist

#### Work-Based Learning Activities

- Earn an IT certification

### Industry-Based Certifications

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



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Computer Network Architects	\$111,633	1,082	23%
Computer Systems Analysts	\$87,568	5,937	29%
Computer Network Support Specialists	\$68,037	1,824	19%

Successful completion of the Networking Systems 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

# Networking Systems Course Information

## Level 1

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

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Maintenance Computer Maintenance (Personal Computer Hardware ITSC1325/Intro to PC Operating Systems ITSC1305)	13027310 (2 credit)	Principles of Information Technology	None
Business Information Management I (BCIS1305/POFI2301)	13011400 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Networking/Lab (Network+ ITNW1358/ Fundamentals of Networking Technologies ITNW1325)*	13027400 (1 credit)	RPREQ: Principles of Information Technology, Computer Maintenance, and Computer Maintenance Lab CREQ: Networking	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Information Technology (Fundamentals of Info Security ITSY1300/ Info Tech Security ITSY1342)*	13028000 (2 credits)	Minimum of two high school Information Technology (IT) courses	None

\*TVCC Computer Science Network & Security OSA Requirement

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>

Mabank ISD 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: Mr. Clay Tracy, MISD Associate Superintendent, 310 E. Market Street, Mabank, TX 75147, 903-880-1305.

Further nondiscrimination information can be found at

[Notification of Nondiscrimination in Career and Technical Education Programs.](#)