# **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

Computer Science I

#### Level 2

Internetworking Technologies I

#### Level 3

· Internetworking Technologies II

#### Level 4

• Independent Study in Evolving/Emerging Technologies

## **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**

Work-Based Learning
Activities

- Join TSA
- Job shadow a computer network architect or support specialist
- Earn an IT certification

#### **Industry-Based Certifications**

- Cisco 100-490 RSTECH Supporting Cisco Routing and Switching Network Devices
- Cisco CCNA (200-301) Implementing and Administering Cisco Solutions
- CompTIA A+ Certification
- CompTIA Network+
- CompTIA Server+
- · Computer Networking Fundamentals Job Ready
- Google Cloud Certified Professional Cloud Architect
- Associate of (ISC)\*

\*IBC sunsetting 8/31/24





# **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%



# **Networking Systems Course Information**

#### Level 1

COURSE NAME	SERVICE ID	PREREQUISITIES	COREQUISITES
Computer Science I	03580200 (1 credit)	None	Algebra I

#### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Internetworking Technologies I	N1302803 (1 credit)	None	None

#### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Internetworking Technologies II	N1302804 (1 credit)	Internetworking Technologies I	None

#### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Independent Study in Evolving/Emerging Technologies	03581500 (1 credit)	None	None

FOR ADDITIONAL INFORMATION ON THE INFORMATION TECHNOLOGY CAREER CLUSTER,
PLEASE CONTACT: CTE@tea.texas.gov
https://tea.texas.gov/cte

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Further nondiscrimination information can be found at <u>Notification of Nondiscrimination in Career and Technical</u> <u>Education Programs</u>.