



CAREER PATHWAY

# NETWORK SYSTEMS

Computer User Support Specialists | Computer Programmers | Network & Computer Systems Administrators | Database Administrators | Computer Systems Analysts | Information Security Analysts | Software Developers

## CAREER TECHNICAL COURSES


7	
8	Information Technology
9	Computer Hardware
10	Computer and Mobile Applications
11	Networking Network Management
12	Network Security Information Technology Capstone

## INDUSTRY CREDENTIAL OPPORTUNITIES

- IC3 Digital Literacy GS6 - **3 Points**
- CompTIA IT Fundamentals - **6 Points**
- CompTIA Network+ - **6 Points**
- ITA Cloud Computing - **1 Point**
- ITS Computational Thinking - **1 Point**
- ITS Device Configuration & Management - **1 Point**
- ITS HTML & CSS - **1 Point**
- ITS Software Development - **1 Point**
- ITS Networking - **1 Point**
- ITS Network Security - **1 Point**
- Ohio Driver's License - **1 Point**
- OSHA-10 - **1 Point**
- CPR First Aid - **1 Point**
- Leadership Excellence - Student - **3 Points**
- Lean Six Sigma Yellow Belt - **3 Points**
- Lean Six Sigma Green Belt - **6 Points**
- CompTIA Security+ - **6 Points**
- CompTIA A+ - **6 Points**

## COLLEGE CREDIT OPPORTUNITIES

Students who demonstrate proficiency in career tech courses in approved secondary programs can receive college credit for their approved coursework.

**POTENTIAL PLACEMENT & INCOME** - 

*\*May 2022 State Occupational Employment and Wage Estimates for Ohio*

Computer User Support Specialists	\$53,770
Computer Programmers	\$85,630
Database Administrators	\$91,200
Network & Computer Systems Administrators	\$96,120
Computer Systems Analysts	\$100,830
Information Security Analysts	\$105,960
Software Developers	\$108,530



# NETWORK SYSTEMS CAREER PATHWAY

SUBJECT  
CODE

**145005**

## INFORMATION TECHNOLOGY

This first course in the IT career field is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking. Students will also learn about input/output systems, computer hardware and operating systems, and office applications.

SUBJECT  
CODE

**145025**

## COMPUTER HARDWARE

College Credit  
**CTIT014**  
3 Credit Hours

Students will learn to install, repair, and troubleshoot computer hardware systems. They will perform preventative maintenance practices and learn techniques for maintaining computer hardware security. Communication skills and professionalism in troubleshooting situations will be emphasized.

SUBJECT  
CODE

**145020**

## COMPUTER AND MOBILE APPLICATIONS

Students will learn to create applications for mobile devices using a variety of commercial and open source software. They will install these applications, modify them, and develop customer service skills to handle user issues. Knowledge and skills related to customer service in professional offices, small businesses, departments, work groups, and corporate information services will be addressed.

SUBJECT  
CODE

**145035**

## NETWORKING

College Credit  
**CTIT002**  
3 Credit Hours

Students will install, configure, and troubleshoot network hardware and peripherals. Students will learn networking by exploring the OSI model, network topologies, and cabling. Students will design simple networks, know how to select physical devices, and be able to configure the equipment. Knowledge and skills relating to the operation and usage of network protocols will be developed.

SUBJECT  
CODE

**145045**

## NETWORK MANAGEMENT

College Credit  
**CTIT002**  
3 Credit Hours

Students will install, configure, and troubleshoot network hardware and peripherals. Students will learn networking by exploring the OSI model, network topologies, and cabling. Students will design simple networks, know how to select physical devices, and be able to configure the equipment. Knowledge and skills relating to the operation and usage of network protocols will be developed.

SUBJECT  
CODE

**145050**

## NETWORK SECURITY

College Credit  
**CTIT006**  
3 Credit Hours

This course will address securing networks and operating systems. Students will learn to secure network communications, computer hardware, and network software. Topics include: network security theory, cryptography, security architecture, firewalls, VPNs, IP Security, and methods of protection.

SUBJECT  
CODE

**145015**

## INFORMATION TECHNOLOGY TECHNOLOGY CAPSTONE

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Information Technology program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or internship.