# **Information Technology Support and Services**

Information Technology Support and Services is a one-credit course designed to provide students with knowledge of computer hardware, operating systems, and computer software applications. This course provides students with additional skills necessary to effectively plan, develop, and administer both a local area network (LAN) and a wide area network (WAN). Topics addressed in this course include network operating systems, network architectures, network protocols, and network security. In addition, network scalability and adaptability are discussed regarding emerging computer technologies. It is recommended that Business Technology Applications be taken prior to enrollment in this course.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

#### **Customer Service**

Students will:

- 1. Demonstrate customer service skills related to information technology support and services.
- 2. Utilize mathematics skills to develop information technology budgets and support costs.
- 3. Develop information technology short- and long-term budgets, including calculating supply costs, preventive maintenance repairs, hardware replacement, and hardware and software upgrades.

## Troubleshooting

- 4. Analyze computer problems to determine solutions by using the troubleshooting process.
- 5. Apply the troubleshooting process to repair computer problems with software and hardware components.
- 6. Analyze technical support to identify support requirements, skill-level needs, customer needs, information and data analysis, and data and system configuration to formulate a support plan.
  - Demonstrating proper documentation for support provided
  - Utilizing oral and written communication skills to train computer users

## **System Design and Upgrading**

7. Demonstrate ability to manage network user account access, including assigning of account privileges, producing required documentation, and maintaining training manuals.

- 8. Manage software systems, including performing configuration management activities, updating virus protection software, and evaluating application software packages.
- 9. Explain components of information system analysis and design.
  - Initiating a system design project
  - Evaluating applications within the information system
- 10. Utilize research results to evaluate software requirements to meet various system needs.
- 11. Identify the purchasing process for determining system needs related to equipment, supplies, and upgrades.

### **Career Opportunities**

12. Determine career and entrepreneurial opportunities, responsibilities, and educational and credentialing requirements related to information technology support and services career opportunities.

### **Ethics**

- 13. Explain ethical uses of electronic media and communication devices for various situations.
- 14. Explain the importance of information privacy in the workplace. Examples: protecting employee and customer information, disposing of confidential information appropriately