

## **SOC Code: 15-1152 Computer Network Support Specialists**

SOC Job Description: Analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption.

### **Sample of Job Titles**

- Computer Network Specialist \* IT Consultant (Information Technology Consultant) \* Network Engineer \* Network Specialist \* Network Support Specialist \* Network Technical Analyst \* Network Technician \* Personal Computer Network Analyst \* Senior IT Assistant (Senior Information Technology Assistant) \* Systems Specialist

### **Typical Tasks**

- Analyze and report computer network security breaches or attempted breaches.
- Analyze network data to determine network usage, disk space availability, or server function.
- Back up network data.
- Configure and define parameters for installation or testing of local area network (LAN), wide area network (WAN), hubs, routers, switches, controllers, multiplexers, or related networking equipment.
- Configure security settings or access permissions for groups or individuals.
- Document procedures for hardware and software installation and use.

The C-Tech Multimedia Tech certification is a capstone certification that is constructed from the individual courses listed below. Each of the individual courses earns a unique certification in that field of study and allows students to construct a field of knowledge that results in the capstone certification. To earn the C-Tech Multimedia certification students must complete and certify in each of the listed courses. Students who do not complete nor certify in the complete list of courses will not receive the combined C-Tech CAPE Multimedia certification.

## Individual course descriptions

### **Introduction to Telecommunications version 2.0**

**Total Hours: 40**

Connect with today's Business and Smart Home technologies by receiving hands-on training in business and intelligent communications systems. Topics that are covered include the basics of home networking, automation, and security and entertainment systems. Learn skills that range from setting up a home office to fine-tuning a home theater sound simply by moving speakers. This course provides understanding of both today's and tomorrow's Smart Home and Business Systems and is also a must for careers in architecture, interior design, construction, installation, real estate, and all other fields that frequently come into contact with these rapidly evolving technologies.

### **Introduction to Network Cabling – Copper-based systems version 3.3.1**

**Total Hours: 40**

This course is a hands-on, short-term program that provides the skills and knowledge desired universally by industry professionals for entry-level employment in the telecommunications connectivity field. Graduates will be versed in all phases of installation and maintenance of copper networking systems to include data, voice and video for both commercial and residential applications. Students work with actual cabling and connectivity devices as they terminate, test and troubleshoot copper-based data, voice and video systems as found in Business and Smart Homes. Also covered in the course are commercial and residential cabling standards, cable routing and placement.

### **Introduction to Network Cabling – Fiber Optic-based systems version 3.3**

**Total Hours: 30**

This course is a short-term but hands-on program that will provide students with the skills and understanding necessary to land employment positions involving fiber optic connectivity as found in commercial and residential applications. Knowledge gained from this program is highly sought-after by professionals in the industry looking to hire entry-level technicians. Students will learn the theory behind fiber optic transmission systems as well as practice sharpening skills required for effective fiber cable termination and splicing.

Other topics touched upon throughout the course are cabling standards, cable routing and placement, and the testing and troubleshooting of fiber optic cabling systems.