

# Communications Technologies/Technicians and Support Services CIP Code 10.9999

### **Introduction – Program of Study**

There are numerous careers available in the Communications Technology area. Multimedia technology specialists provide services in a variety of areas associated with typography, web and graphic design, video, audio, television production, animation and photography. Students in this program will be exposed to a variety of skill areas in order to specialize in a related career.

Instruction in this program includes, but is not limited to, computer system setup and maintenance, basic computer and communication operations and applications, design and layout of graphic and multimedia images, photography, website, video and/or audio design and production.

Graphic designers, or graphic artists, plan, analyze and create visual solutions to communications problems. They find the most effective way to convey messages in print and electronic media using color, type, illustration, photography, animation, and various print and layout techniques. Graphic designers develop the overall layout and production design of magazines, newspapers, journals, corporate reports and other publications. They also produce promotional displays, packaging, and marketing brochures for products and services; design distinctive logos for products and businesses; and, develop signs and signage systems for business and government. An increasing number of graphic designers also develop material for internet web pages, interactive media and multimedia projects.

Audio and video equipment technicians setup and operate audio and video equipment, including microphones, speakers, video screens, projectors, video monitors and recording equipment. They also connect wires and cables, setup and operate sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations and news conferences. They may setup and operate associated spotlights and other custom lighting systems. They also are needed to install and maintain equipment in many large businesses and universities that are upgrading their facilities with audio and video equipment.

Network and computer systems administrators design, install and support an organization's computer systems. They are responsible for local area networks (LANs), wide area networks (WANs), network segments, and internet and intranet systems. They work in a variety of environments including large corporations, small businesses and government organizations. They install and maintain network hardware and software, analyze problems and monitor networks to ensure their availability to users.

Revised July 2013

Photographers produce and preserve images that paint a picture, tell a story or record an event. These individuals need technical expertise, creativity and the appropriate professional equipment to create commercial quality photographs. Photographers may specialize in areas such as portrait or commercial photography.

### **Assumptions of this Program of Study**

High quality programs should meet the following standards:

- 1. Promote positive working relationships.
- 2. Implement a curriculum that fosters all areas of skill development
- 3. Use appropriate and effective teaching approaches.
- 4. Provide ongoing assessments of student progress.
- 5. Employ and support qualified teaching staff.
- 6. Establish and maintain relationships and use resources of the community.
- 7. Provide a safe and healthy learning environment.
- 8. Implement strong program organization and supervision policies that result in high quality teaching and learning.
- 9. Integrate academic skills and aptitudes necessary for postsecondary education, gainful employment and a foundation of lifelong learning.

### **CIP Code**

## 10.9999 Communications Technologies/Technicians and Support Services

This program prepares individuals to apply knowledge and skills in the field of multimedia technology. Multimedia technology specialists provide services in a variety of areas associated with typography, web and graphic design, video, audio, television production, animation, and photography.

Instruction in this program includes, but is not limited to, audio/visual technology, troubleshooting techniques, computer operation and maintenance, data transmission and management, oral and written communication, math and physics, concept development, layout and design, computer graphics, image capture, audio, video, web related technologies and animation.

#### For more information, contact:

The Pennsylvania Department of Education Bureau of Career and Technical Education 333 Market Street, 11th Floor Harrisburg, PA 17126-0333

Phone: 717-346-9735 Fax: 717-783-6672 TTY: 717-783-7445

Revised July 2013 2