

Computer Center Management

**Administration and Staff of a
Computer Center**

Computer and Information Systems Managers

■ Duties

- Computer and information systems managers, often called information technology (IT) managers or IT project managers, plan, coordinate, and direct computer-related activities in an organization. They help determine the information technology goals of an organization and are responsible for implementing computer systems to meet those goals.**

■ Entry level education

- Doctoral or professional degree**

Computer and Information Research Scientists

- **Duties**

- Computer and information research scientists invent and design new approaches to computing technology and find innovative uses for existing technology. They study and solve complex problems in computing for business, medicine, science, and other fields.

- **Entry level education**

- Doctoral or professional degree

Computer Hardware Engineers

- **Duties**

- Computer hardware engineers research, design, develop, and test computer systems and components such as processors, circuit boards, memory devices, networks, and routers. By creating new directions in computer hardware, these engineers create rapid advances in computer technology.

- **Entry level education**

- Bachelor's degree

Computer Network Architects

- Duties
- Computer network architects design and build data communication networks, including local area networks (LANs), wide area networks (WANs), and intranets. These networks range from a small connection between two offices to a multinational series of globally distributed communications systems.
- Entry level education

Computer Programmers

- **Duties**

- Computer programmers write code to create software programs. They turn the program designs created by software developers and engineers into instructions that a computer can follow.

- **Education**

- Bachelor's degree

Computer systems analysts

- **Duties**

- Computer systems analysts study an organization's current computer systems and procedures and design information systems solutions to help the organization operate more efficiently and effectively. They bring business and information technology (IT) together by understanding the needs and limitations of both.

- **Education**

- Bachelor's degree \$79,680

Database administrators

- **Duties**

- Database administrators (DBAs) use specialized software to store and organize data, such as financial information and customer shipping records. They make sure that data are available to users and are secure from unauthorized access.

- **Education**

- Bachelor's degree

Information security analysts

- **Duties**

- Information Security Analysts
- Information security analysts plan and carry out security measures to protect an organization's computer networks and systems. Their responsibilities are continually expanding as the number of cyberattacks increase.

- **Education**

- Bachelor's degree

Network and computer systems administrators

- **Duties**

- Computer networks are critical parts of almost every organization. Network and computer systems administrators are responsible for the day-to-day operation of these networks.

- **Education**

- Bachelor's degree

Software developers

- **Duties**

- Software developers are the creative minds behind computer programs. Some develop the applications that allow people to do specific tasks on a computer or other device. Others develop the underlying systems that run the devices or control networks.
- **Education**
 - Bachelor's degree

Web developers

- **Duties**

- Web developers design and create websites. They are responsible for the look of the site. They are also responsible for the site's technical aspects, such as performance and capacity, which are measures of a website's speed and how much traffic the site can handle. They also may create content for the site.

- **Education**

- Associate's degree

Computer Support Specialists

Duties

- Computer support specialists provide help and advice to people and organizations using computer software or equipment. Some, called computer network support specialists, support information technology (IT) employees within their organization. Others, called computer user support specialists, assist non-IT users who are having computer problems.

Education

- Bachelor's / Associate's degree or Postsecondary education