

# Computer and Information Systems Managers (SOC 11-3021)

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.



Sample of reported job titles: Information Technology Manager (IT Manager), Information Technology Director (IT Director), Information Systems Director (IS Director), Data Processing Manager, MIS Director (Management Information Systems Director), Information Systems Manager (IS Manager), Information Systems Supervisor (IS Supervisor), Computing Services Director, Director of Application Development, Technical Services Manager

## Job Responsibilities

- Analyze their organization's computer needs and recommend possible upgrades to top executives
- Plan and direct installing and upgrading computer hardware and software
- Ensure the security of an organization's network and electronic documents
- Assess the costs and benefits of a new project and justify spending on the project to top executives
- Learn about new technology and look for ways to upgrade their organization's computer systems
- Determine short- and long-term personnel needs for their department
- Plan and direct the work of other IT professionals, including computer systems analysts, software developers, information security analysts, and computer support specialists
- Negotiate with vendors to get the highest level of service for their organization's technology

## New Hampshire Outlook

- Average Hourly Wage\*: \$63.53
- Estimated Employment 2014: 1,819
- Projected Employment 2024: 2,127
- Expected 10-Year Growth: 16.9%
- Projected Average Annual Openings: 53

## Top industries in NH for this occupation:

- Computer Systems Design and Related Services
- Insurance Carriers and Related Activities
- Publishing Industries

## Education and Training

Computer and information systems managers normally must have a bachelor's degree in a computer- or information science-related field. Such a degree usually takes 4 years to complete and includes courses in computer programming, software development, and mathematics. Management information systems (MIS) programs usually include business classes as well as computer-related ones.

Many organizations require their computer and information systems managers to have a graduate degree as well. A master of business administration (MBA) is common and takes 2 years beyond the undergraduate level to complete. Many people pursuing an MBA take classes while working, an option that can increase the time required to complete that degree.

\* Wage estimates based on surveys conducted from November 2012 to May 2015.

**Interests (Holland Code):** ECI

- **Enterprising:** Enterprising occupations frequently involve starting up and carrying out projects. These occupations can involve leading people and making many decisions. Sometimes they require risk taking and often deal with business.
- **Conventional:** Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.
- **Investigative:** Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.

**Career Cluster:** Business Management & Administration

**Work Environment**

Most computer and information systems managers work full time. Many of them must work overtime to solve problems. In 2014, about 2 in 5 worked more than 40 hours per week. As network speeds increase, telecommuting is becoming more common. Although few managers can work remotely, many have to supervise employees who work from home.

**Additional Information Sources\*\***

Association for Computing Machinery, <[www.acm.org](http://www.acm.org)>  
Institute of Electrical and Electronics Engineers (IEEE), <[www.computer.org](http://www.computer.org)>  
Computing Research Association, <[www.cra.org](http://www.cra.org)>  
CompTIA, <[www.comptia.org](http://www.comptia.org)>  
Cyber Security Degrees, <[www.cyberdegrees.org](http://www.cyberdegrees.org)>

**To Find a Job**

Contact the nearest NH Employment Security office or go online to [www.nhes.nh.gov](http://www.nhes.nh.gov)

\*\* Inclusion of this information is intended to provide a convenient resource for research, but in no way constitutes an endorsement for any organization, nor is the list all-inclusive.

**Source:**

NH Employment Projections, base year 2014 to projected year 2024  
Occupational Outlook Handbook, Bureau of Labor Statistics



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