

Information Security Analyst

What do they do?

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 increases.

Where do they work?

Most information security analysts work for computer companies, consulting firms, or business and financial companies. Because of highly confidential information many hospitals employ information security analysts as well.

Pay:

According to the U.S. Bureau of Labor Statistics, the average yearly income for an Information Security Analyst is \$103,590.



Education:

Most information security analyst positions require a bachelor's degree in a computer-related field. Employers usually prefer to hire analysts with experience in a related occupation.

Information Security training in Madison:

Madison Area Technical College:
<https://madisoncollege.edu/program/network-security-specialist>

High School students interested in becoming an Information Security Analyst should take classes in computer science, technology, computer programming.

Professional Associations:

Association for Computing Machinery
Computing Research Association
IEEE Computer Society

For information about opportunities for women pursuing information technology careers, visit:
National Center for Women & Information Technology



Certification:

There are a number of information security certifications available, and many employers prefer candidates to have certification, which validates the knowledge and best practices required from information security analysts. Some are general information security certificates, such as the Certified Information Systems Security Professional (CISSP)



Important Qualities:

- *Analytical skills.* Information security analysts must carefully study computer systems and networks and assess risks to determine how security policies and protocols can be improved.
- *Detail oriented.* Because cyberattacks can be difficult to detect, information security analysts must pay careful attention to computer systems and watch for minor changes in performance.
- *Ingenuity.* Information security analysts must anticipate information security risks and implement new ways to protect their organizations' computer systems and networks.
- *Problem-solving skills.* Information security analysts must respond to security alerts and uncover and fix flaws in computer systems and networks.

Potential for Advancement:

Information security analysts can advance to become chief security officers or another type of computer and information systems manager

Job Outlook: According to the U.S. Bureau of Labor Statistics, employment of information security analysts is projected to grow 33 percent between 2020-2030, which is much faster than the average for all occupations. Demand for information security analysts is expected to be very high, as these analysts will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks.

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Information Security Analysts, <https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm> (visited September 08, 2021).

