# What is a Computer Systems Analyst?

Those fulfilling the job role of computer information analyst work as IT professionals who are responsible for the analysis, design, and implementation of computer systems. [Computer systems analysts](http://money.usnews.com/careers/best-jobs/computer-systems-analyst) are expected to keep information systems operating properly and efficiently. To this end, they work with software vendors, computer programmers, and information system users to create the best possible computer networks and information systems.

# Job tasks

A computer systems analyst will spend a significant amount of his or her time on the job studying computer systems and procedures for using these computer systems to carry out tasks that are necessary to organization functioning. An analyst needs to not only understand the IT aspects of keeping the organization running, but also needs to understand the business side of operations.

Among the everyday responsibilities of a systems analyst are making plans for system flow, interacting with system users and customers, writing technical requirements and instructions, testing systems, working with system designers to overcome limitations, and deploying a system once its design has been completed.

Typically, those who work as computer systems analysts fall into one of three categories: systems designers or architects, software quality assurance analysts, and programmer analysts. While systems designers must create technical solutions and software quality assurance analysts must handle problems that arise in systems design, programmer analysts are the ones who actually write code and handle the actual creation of software that addresses company or organization needs.

# Necessary skills

Those aspiring to be computer systems analysts should enjoy working with computers and be curious regarding new technologies. Critical thinking and problem solving abilities are important for computer systems analysts, and it’s important that analysts are able to communicate effectively with others regarding technical subjects. Although they do not necessarily need to do actually coding themselves, analysts usually need to have a basic understanding of programming languages and computer hardware.

# Training

The completion of a [bachelor’s degree program](http://www.computersciencedegreehub.com/best/online-bachelors-programs/) in information technology or computer science is generally necessary to land a job as a systems analysis. Higher level study through the Master’s degree level might make it easier for candidates to find employment. In addition to coursework in programming, software design, and computer systems design, undergraduate curriculums for aspiring computer systems analysts could also include some coursework in business to prepare young professionals for their careers.

Although no certification is required for work as a systems analysis, there are certain certifications available through the Institute for the Certification of Computing Professionals that will certainly be assets to a candidate’s resume.

# Outlook

Those who find work as computer systems analysts typically earn a decent salary. The average salary for those working as systems analysts is about [$80,000](http://www.bls.gov/ooh/computer-and-information-technology/computer-systems-analysts.htm). It is estimated that job opportunities for computer systems analysts will grow significantly faster than job opportunities in other occupations through 2022. In particular, new job opportunities are expected to arise in specializations such as cloud computing, mobile networks, and cybersecurity.

If you’re interested in working with computer networks as a computer information analyst, you can expect many job opportunities and a lucrative career once you have fulfilled the necessary educational requirements.