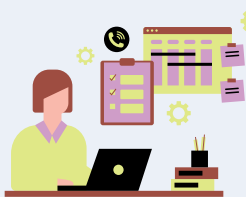


Information System Specialists



Information Systems Specialists are experts who help shape and adapt information technology networks to best help organizations and meet their unique needs. By analyzing hardware and software infrastructure of organizations, they can develop plans, policy and procedures and recommend improvements to computers and networking in order to optimize efficiency and utility of these systems. Information Systems Specialists play a much needed supporting role in all manner of businesses.

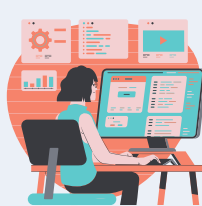
Where do Information System Specialists work?



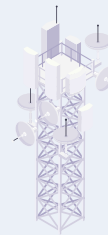
Government Administration



Insurance and Credit Intermediation



Computer System Design and Related Services



Telecommunication Services



Management, Scientific and Technical Consulting

What do Information System Specialists do?

Information Technology Specialists' work has a large impact on core functions within organizations. They perform a number of data administration, data security, and technological infrastructure related tasks. Below are some of the tasks that Information Systems Specialists encounter in their work:

- Collect and analyze data to identify areas for improvement within an organization's IT infrastructure
- Design, develop, test, implement and oversee IT systems
- Develop quality assurance procedures and tests for the development and improvement of new and existing systems
- Develop policies, procedures and contingency plans to minimize the effects of security breaches

Career pathways & potential earnings of Information System Specialists

Information System Specialists can progress into senior management and executive roles with adequate experience and knowledge:

Computer System Programmers



Programmers earn starting wages of \$23/hr, but wages can scale, with earning going up to \$58/hr with experience and skill.

Information System Specialists



Programmers can transition into information systems roles with some training and certification, and can earn up to \$62/hr.

Computer and Information System Managers



Responsible for the data needs and technical support of a department, computer and IS managers can earn up to \$77/hr.

Information System Specialists can also apply their skills and expertise in other occupations such as the following:

- Information System Testing Technicians
- Computer Testing Technicians

How do I become an Information System Specialists?

There are several educational, licensing and training requirements to become an Information System Specialist. Some requirements may vary by province or company. Below are the most commonly required qualifications to work as an Information System Specialist:

- **Minimum Education:** Bachelors degree in computer science, computer systems engineering, software engineering, business administration or a related discipline, or a college diploma in computer science.
- **Certification and Licensing:** Some employers may require a Certified Information Systems Specialist (CISA) or Certified Internal Auditor (CIA) or related information technology designation.
- **Training and other requirements:** Experience in computer programming may be required.



Important skills to have as an Information System Specialist?

The complex and interconnected nature of networks within organizations requires Information System Specialists to have extensive knowledge of computer and network infrastructure. These skills are developed through education and previous experience in other information technology related roles. Below are common skills that will help information systems specialists succeed:

Technical Knowledge and Skills

- Management and Administration
- Programming
- Electrical and Electronics
- Networking Software
- Systems Analysis and Evaluation
- Database Management Software

Soft Skills

- Inductive and Deductive Reasoning
- Judgement and Decision Making
- Coordination
- Troubleshooting
- Monitoring

Future of Information System Specialists in Canada

Information system specialist provide important services to businesses, and enjoy strong employment through all sectors. In 2021, more than 133,000 were employed across Canada's sectors and industries. As the automotive sector transitions to digitized manufacturing systems, and to connected, autonomous, secure and electric (CASE) vehicles, more job opportunities are expected to be available for Information System Specialists.



Learn more about the job market for information system specialists, as well as about many other developments and new technologies in Canada's automotive manufacturing by visiting our website futureautolabourforce.ca.

You can also check our social media by following these links:

 [/focalinitiative](https://www.instagram.com/focalinitiative)

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