

WHAT CAN I DO WITH A BACHELOR OF SCIENCE DEGREE IN INFORMATION TECHNOLOGY?

A Guide Compiled by CUE Career Services



General Skill Sets:

The Bachelor of Science in Information Technology (BSc IT) program trains students in the required knowledge and practical expertise to solve computing technology problems. Students develop theoretical knowledge and practical skills, as well as gain experience applying these skills into an IT work environment during the internship component. With the curriculum covering core IT concepts (e.g., computing and emerging technologies, software development, machine learning and artificial intelligence, and cyber-security) and ethical, legal, and social issues related to IT ([CUE BSc IT](#)), students are prepared to work in related roles across multiple industries and sectors.

University graduates are more likely to be promoted or attain leadership positions than those who do not have a degree. Generally, they move into positions with increased responsibilities and increased pay, or they leave their current employer to take a better-paying role elsewhere, since the degree is combined with work experience.

Skills Acquired from an Undergraduate Degree in Information Technology:

- Think analytically, critically and logically
- Programming skills in various modern languages
- Apply information systems knowledge, concepts and principles
- Research, writing and communication
- Creative problem solving
- Apply computer skills and statistical techniques
- Develop and test IT systems
- Complete projects with information technologies
- Scientific theory and practical knowledge
- Assess, analyze and solve complex computing problems
- Ability to meet deadlines
- Collect and analyze data with precision and accuracy
- Ability to work independently or collaborate on a team
- Demonstrate ethical conduct in information technology
- Show self-direction and motivation
- Manage multiple competing priorities and tasks with varying deadlines
- Knowledge of computer systems and platforms, information security, and applied cryptography
- Knowledge of web design and digital media, database systems and administration and operating systems

Careers for Graduates of an Undergraduate Degree in Information Technology (IT):

There are many different career options for IT graduates. Below is a sample of positions available to graduates:

- Computer Programmer
- Application Programmer
- Computer Specialist
- Information Technology Specialist
- Programmer Analyst
- Information Systems Analyst
- Interactive Media Developer
- Computer Network Technician
- User Support Technician
- Front-End Developer
- Back-End Developer
- Software Developer
- Business Analyst
- Full Stack Developer
- Database Analyst
- Web and Mobile Application Developer
- Computer and Information Systems Managers
- Software Engineers and Designers*
- Administrative Officers
- Research Assistant
- Cloud Architect
- Network Administrator
- IT Help Desk Analyst
- Customer Support Analyst
- Data Administrator
- Multimedia Programmer
- Support Specialist
- User Experience Designer
- Application Developer
- IT Project Manager
- IT Auditor

*As learning is life-long, some careers which are related to an IT Degree require additional training. This may involve weekend, evening or part-time courses; further education (some employers provide support by allowing time or offering finances to assist you in your learning); distance studies; or full time college or university, including graduate studies. In any case, the Bachelor's degree is a valuable starting point.

Industries Related to IT

IT and technology professionals are needed in nearly every industry. Here are some examples...

Healthcare (eg. Clinical Informatics Manager, Interface Developer, Business Analyst, etc.)

Transportation (eg. Data Analyst, App Developer, Web Designer, etc.)

Education (eg. Educational Technology Specialist, Career and Technology Teacher, Classroom IT Support, etc.)

Entertainment (eg. Game Designer, Web Developer, App developer, etc.)

Retail (eg. Customer Analytics, Mobile Experience Manager, Helpdesk Technician, etc)

References

www.alis.gov.ab.ca/occinfo

[Government of Canada. Career Planning Student Dashboard \(IT\)](#)

[CUE Academic Calendar, 20/21](#)

[CUE BSc Information Technology](#)

For more information or assistance with career exploration and planning, please contact CUE Career Services at + (780) 378 – 8461 or our website is careerservices.concordia.ab.ca