

Bachelor of Engineering

SOFTWARE

B.S.E

What is software engineering?

Software engineers design, develop and test the complex software programs that apply computer technology to specific practical ends such as booking an airline ticket or a tennis court on-line, downloading e-mail or scanning items through a check-out line at the grocery store.

Is this the program for me?

Software engineers are self-motivated, enjoy working with computers and are good at math and physics. Since the work involves process design and development, software engineers are both logical and creative.

What kinds of courses do students take?

The first year includes general sciences courses in math, chemistry and physics. Quebec CEGEP students typically receive one-year advanced standing. Then studies focus on computer and electrical engineering, developing students' skills to design and develop complex software systems. In later years, the program becomes more focused on specific issues in software engineering.

Why McGill?

The Faculty of Engineering offers the Bachelor of Software Engineering program with the Faculty of Engineering and the School of Computer Science. The program accepts about 25-50 people per year, allowing students to get to know each other. As well, a degree in software engineering gives students accreditation as a professional engineer.

For further information

Faculty of Engineering
www.mcgill.ca/engineering/

Department of Electrical and Computer Engineering
www.mcgill.ca/ece

What can I do when I graduate?

Software engineers can get a variety jobs, including designing computer software applications, creating flight navigation software, developing video games, designing Web applications and interfaces and writing automation programs for robotics. Software engineering is a major component of the growing Information Technology (IT) sector.

Recent graduates in Software Engineering have gone on to exciting careers in a wide variety of industries, here are just a few:

- **Amazon**, Software Development Engineer
- **Electronic Arts**, Software Engineer
- **Google**, Software Developer
- **Longbow**, QA Engineer
- **Microsoft**, Software Design Engineer
- **Morgan Stanley**, Technology Associate
- **Teradyne, Jr.** Software Engineer

How do I apply?

Admissions information:
www.mcgill.ca/engineering/future-students/how-apply



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Industries

These are some common industries that require software engineers:

- Information & Communications Technologies
- Software Publishing
- Energy & Utilities: Hydro, Oil & Gas, Water, Sewage
- Engineering & Management Consulting
- Finance & Insurance
- Manufacturing
- Scientific & Technical Services

Useful Resources

- **McGill Engineering Student Affairs Office (SAO)**
Housed in the Engineering Student Centre; Academic Advisors provide assistance and information on program planning and academic success
- **McGill Engineering Career Centre (ECC)**
Resources, information, job postings and links for engineering students

- **myFuture**
Job postings McGill students
- **The Engineering Institute of Canada**
Engineering Career Network

Professional Organizations

- **Engineers Canada**
The national organization of the 12 licensing bodies that regulate the practice of engineering in Canada
- **Ordre des ingénieurs du Québec**
The regulating body for Engineers in Quebec
- **Institute of Electrical and Electronics Engineers (IEEE)**
IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.
- **Association for Computing Machinery**
Educational and scientific computing society, delivers resources that advance computing as a science and a profession.

Student Life

There are several student organizations to help ensure that school life maintains a good mix of work and pleasure.

- **Engineering Undergraduate Society (EUS)**
www.mcgilleus.ca/
- **Electrical, Computer, & Software Engineering Student Society (ECSESS)**
Represents all students in Electrical, Computer and Software Engineering (ECSE)
- **Engineers Without Borders – McGill Chapter**
mcgill.ewb.ca/
- **Institute of Electrical and Electronics Engineers (IEEE) McGill student branch**
Dedicated to the development of professional skills
- **Promoting Opportunities for Women in Engineering (POWE)** www.mcgill.ca/engineering/current-students/undergraduate/student-life/powe



Contact Us

McGill Engineering Student Centre (MESC)
Student Affairs Office, Career Centre, Peer Tutoring Services
Frank Dawson Adams Building
Room 22
3450 University Street
Montreal, Quebec H3A 0E8

Student Affairs Office (SAO):
Telephone: 514-398-7257
Email: info.faceng@mcgill.ca
www.mcgill.ca/engineering/current-students/undergraduate/mesc

Engineering Career Centre (ECC):
Telephone: 514-398-8100
Email: careers4engineers@mcgill.ca
www.mcgill.ca/careers4engineers



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