What can you do with a degree in… Electrical Engineering?

What is Electrical Engineering?

Electrical engineers design, build, test, and supervise the manufacturing and operation of a variety of electrical devices: from the power generation and distribution networks that power our homes and industries to the microchips that control our computers, video games and hospital equipment; from mobile phones to the internet and fibre optic and satellite communications; from robots in spacecraft to cars and industrial systems.

Electrical engineers are versatile and creative thinkers who are good at math and physics and enjoy applying scientific knowledge to solve problems. Strong communication skills are very important, since electrical engineers often work in teams with people from other disciplines, such as biomedical, civil, material and mechanical engineers.

Where do graduates work?

Electrical engineers most often work in the fields of telecommunications, computers, control, electronics, microelectronics, signal processing, and power. Electrical engineers create products such as control systems for cars and airplanes, communications satellites, cell phones, microelectronic devices, the internet and wireless communication systems, electric power distribution systems and microprocessors for computers and programmable devices.

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

Accenture, Business Analyst
Ciena, Global Technical Support Associate
Cisco Systems, Hardware Engineer
Deloitte, Business Analyst
Ericsson, Software Developer
Hydro Quebec, Distribution Engineer
National Instruments, Application Engineer
OTIS, Sales Associate

Industries

Electrical Engineering gives students a broad understanding of the key principles that are responsible for the extraordinary advances in the technology of computers, micro-electronics, automation and robotics, telecommunications and power systems.

- Information & Communications Technologies
- Electronics
- Energy & Utilities: Alternative Energy, Hydro, Oil & Gas, Water
- Engineering & Management Consulting
- Construction
- Finance and Insurance
- Power Engineering
- Manufacturing
- Scientific and Technical Services
- Pharmaceuticals, Biotechnology and Medical Devices
- Transportation

Useful Resources

Career Resources

McGill University's 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

Institute of Electrical and Electronics Engineers (IEEE)
- IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.

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

The Engineering Institute of Canada
- Engineering Career Network

Association for Computing Machinery
- Educational and scientific computing society that delivers resources to 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.

Electrical, Computer, & Software Engineering Student Society (ECSESS)
- represents all students in the Electrical, Computer and Software Engineering

Engineering Undergraduate Society (EUS)

Institute of Electrical and Electronics Engineers (IEEE) McGill student branch

Institut en génie de l'énergie électrique

Promoting Opportunities for Women in Engineering (POWE)

Engineers Without Borders
Student Affairs Office
- Housed in the Engineering Student Centre; Academic Advisors provide assistance and information on program planning and academic success.

Salary Information

Starting salaries will vary according to location, industry and employer.

Average annual salaries for new graduates
Canada: $50,000 - $58,000
United States: $57,300

Internship Salaries
$15 - $26 per hour

Sources include: CACEE Campus Recruitment and Benchmark Survey (2011), NACE Salary Survey 2009, RIQ Enquete sur la rémunération directe des ingénieurs salariés du Québec (2012)

Contact Us

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