



ELECTRICAL ENGINEERING

What is Electrical Engineering?

Electrical engineers harness electrical energy for human benefit. As a Western Electrical engineering student, you will embrace the study and application of electricity, electronics, and electromagnetism. Your knowledge will be applied to fields such as: electronics, digital computers, robotics, power engineering, telecommunications, control systems, and signal processing. Electrical engineering will prepare you to take on the world's power and energy challenges.

Power the future



OPTIONS

- Electrical Engineering
- Wireless Communication
- Power Systems
- Biomedical Signals and Systems



CAREER POSSIBILITIES

- Bioengineering
- Consumer Electronics
- Telecommunications
- Power Systems

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NIKITA BABAILOV

BESc. '16
Data Scientist, RN Financial Corporation

- International Exchange, St. Petersburg, Russia
- Year-Long Internship
- Combined Degree - Ivey HBA

“ I work with a team of brilliant minds and every day presents new challenges, but the design thinking and analytical rigour practiced at Western has well-equipped me. I'm happy I made the decision to study in London. I chose my program very carefully knowing full well that I had a long way to grow personally, academically, and professionally. Western Engineering allowed me to keep my options open through its combined degree and internship opportunities, and explore career paths I did not know existed or knew little about. ”



WESTERN'S ELECTRICAL ENGINEERING

All Western Engineering students must complete a common first year. Courses include: Applied Mathematics — Calculus, Applied Mathematics — Linear Algebra, Business for Engineers, Chemistry, Computer Programming Fundamentals, Foundations of Engineering Practice, Physics, Properties of Materials and Statics. Upon completing first year, students may apply to the Electrical Engineering program in one of the following options:

Wireless Communication Option

Wireless Communication is one of the most dynamic areas of industrial development and research. Our program allows students to explore the operation and design of communication systems. Courses in theory and design of Communications Systems, Antennas, Data Networks and Digital Signal Processing form the core of this option.

Power Systems Engineering Option

The world is looking to develop sustainable, environmentally friendly and diversified sources of electrical energy. There is also a significant demand in the power generation and distribution industry for renewal and expansion of technical personnel. This option offers students a solid background in design and the operation of conventional power systems, as well as insight into modern and alternative sources of electric power generation.

Biomedical Signals and Systems Option

As society continues to age, there is a higher demand for intensive upgrades and modernization of medical equipment, resulting in a greater need for engineers specializing in design, manufacturing and servicing of such devices. This option offers students a solid background in the fields of signal processing, imaging and biomedical systems.

