



LAKEHEAD UNIVERSITY - GEORGIAN COLLEGE ENGINEERING PARTNERSHIP

Bachelor of Engineering (Electrical) from Lakehead University with Advanced Diploma (Electrical Engineering Technology) from Georgian College

The BEng (Electrical Engineering)* Lakehead-Georgian Partnership by Lakehead University and Georgian College offers an integrated Bachelor of Engineering Degree and Electrical Engineering Technology Advanced Diploma. Offered at the Georgian College Barrie campus, students will complete both a degree and a diploma in 4 years.

The program provides students with a solid foundation across all areas of electrical engineering allowing them to gain valuable theoretical knowledge, practical engineering and applied technology skills. Specific course offerings focus on subfields such as digital and analog micro-electronics, power electronics, communication

systems, computer networks, power systems and electrical machinery.

Graduates are well equipped for future specialization and a wide range of career opportunities. Electrical engineers deal with the design of economically viable and ecologically balanced electronic and electrical equipment and systems. Beyond the design, engineers are involved in all stages of product or system development, from manufacturing and testing, to maintenance and troubleshooting in the field. The career of an electrical engineer is often centered on a combination of these work areas and some choose to move into specialized areas such as consulting, entrepreneurial product design, marketing, or project management after gaining more experience.

* Graduates of the Lakehead-Georgian Partnership will be awarded a Lakehead University Bachelor of Engineering (BEng) degree. In addition, the Lakehead-Georgian partnership program will seek accreditation with the Canadian Engineering Accreditation Board (CEAB) when the initial cohort reaches year-4 per the standard CEAB process that is used for all Lakehead BEng programs.

CONTACT US

WE WANT TO HELP YOU PLAN YOUR FUTURE!

Faculty of Engineering

Phone: (807) 343-8252 or 343-8321

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engineering.lakeheadu.ca/

Enrolment Services - Undergraduate Admissions

Phone: (807) 343-8500

Toll Free: (800) 465-3959
lakeheadu.ca



Lakehead
 UNIVERSITY

LAKEHEAD - GEORGIAN PARTNERSHIP ELECTRICAL ENGINEERING CURRICULUM

FIRST YEAR - FALL TERM

Calculus I
Modern Chemistry I
Introductory Physics I
Technical Writing
Computer Programming
Electrical Circuit Theory I
Vectors & Matrices

FIRST YEAR - WINTER TERM

Calculus II
Modern Chemistry II
Introductory Physics II
Introduction to Engineering Design
Complementary Studies Elective
Electrical Circuit Theory II

SECOND YEAR - FALL TERM

Laplace Transform and Matrix Methods
for Electrical Engineers
Vector Calculus
Entrepreneurship
Mechanics of Materials
Electronics I
Computer Logic Circuits

SECOND YEAR - WINTER TERM

Engineering Probability and Statistics
Electronics II
Technology and Society
Introduction to Microcontrollers
Complex Functions and Partial
Differential Equations
Electromagnetic Theory

THIRD YEAR - FALL TERM

Material Science for Electrical
Engineers
Digital VLSI Circuit Design
Communication Systems
Complementary Studies Elective
Circuit Analysis & Design I
Electric Machines

THIRD YEAR - WINTER TERM

Digital Signal Processing
Circuit Analysis & Design II
Control Systems
Economic Analysis for Engineers
Numerical Methods & Modeling
Embedded Systems

FOURTH YEAR - FALL TERM

Degree Project
Digital Communications
Power Systems
RF Circuits Design
Engineering Elective I
Engineering Elective II

FOURTH YEAR - WINTER TERM

Degree Project
Computer Networking
Power Electronics & Drives
Professional Practice & Law
Engineering Elective III
Engineering Elective IV



GARIN SCHOONHOVEN

**BACHELOR OF ENGINEERING
(ELECTRICAL)
FIRST CLASS STANDING
LAKEHEAD UNIVERSITY
MAY 2013**

Studying Electrical Engineering at Lakehead University has shown me that with commitment and a supportive and intellectually stimulating academic environment it is possible not only to succeed, but thrive. Further, I have found that smaller class sizes at Lakehead foster improved student/professor interactions and a more personal environment for students, factors I consider critical for proper learning.

My positive experience extended beyond the classroom; during my time at Lakehead I was an active member of the cycling community, both on campus and as a member of the local mountain biking club. I feel these activities contributed to a healthy lifestyle and academic success.

The combination of my practical experience from college in conjunction with the degree in Electrical Engineering from Lakehead University has enabled me to pursue a challenging career in the electrical/electronics engineering profession.