



CREDENTIAL	PROGRAM CODE	AREA OF INTEREST	LOCATION	DURATION
Ontario College Advanced Diploma	Fall: 0396 Winter: 0348	Engineering Technology	Thunder Bay	3 -year

Overview

Our world is becoming more automated all of the time. Building control systems, manufacturing processes, industrial automation, power generation and distribution, and thousands of other processes.

They all rely on electrical equipment and digital processes to keep them operating properly and communicating to each other. But it still takes a person to design, program, install and maintain all of that equipment. Could that person be you?

Confederation College's Electrical Engineering Technology three-year Ontario College advanced diploma program is a program of study that places special emphasis on computerized control applications using state-of-the-art DCS, PLCs, drive systems, as well as today's leading panel and PC-based SCADA/HMI packages. You'll learn about electronics and computer fundamentals, applied mathematics, , networks, automation control systems, process control systems and power systems. Graduates will also have completed the academic requirements for the four levels of trade school for the 442A Industrial Electrical Apprenticeship.



Top Highlights

- Learn about electric machines and drives, PLCs, computer networks, power systems, process control systems and electrical trades
- All four levels of Electrical Apprenticeship trade school curriculum for 442A Industrial are covered in this program.
- Two optional co-op work placements give you experience in the field
- Recognized by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT)
- Continue on to a university engineering degree and a career path as a professional engineer through Lakehead University's transfer program



Employment Opportunities

Graduates of the technology program have been successful in positions working with electrical power generation, electrical power distribution, industrial automation and controls,, computer networking, engineering firms, electrical design, electrical repair and maintenance, and the electrical trades. See confederationcollege.ca/program/electrical-engineering-technology/employers for a list of companies that hire our graduates.

Graduates of the three-year program often have the advantage in hiring situations and go on to advanced positions including design and managerial positions and tend to earn a higher salary.



Experiential Learning

Optional Co-op



Steve Cormier, P.Eng, Program Coordinator

(807) 475-6244
sbcormie@confederationcollege.ca



Electrical Engineering Technology

Admission Requirements

- Ontario Secondary School Diploma (or equivalent) with courses from the College (C), University (U), University/College (U/C), or Open (O) preparation levels with Grade 12 English (C/U) Level.
- or successful completion of the Mature Student Assessment.
- or successful completion of the General Education Development Test (GED).
- or appropriate credits from the Academic and Career Entrance program (ACE).

Additional Required Courses

- Grade 11 MCF3M Functions and Applications, or MCR3U Functions, or Grade 12 MAP4C Foundations for College Math or MCT4C Mathematics for College Technology or University Preparation.

Alternative Pathways

If you do not meet the entrance requirements, we encourage you to apply for the Pre-Technology-Technology/Aviation program to facilitate success in your technology path.

Articulation Agreements

Confederation College has agreements in place that permit credits earned throughout this program to be transferred to programs at other colleges and universities.

Graduates of this program have the opportunity to finish their Electrical Engineering degree with Lakehead University, through Lakehead's college transition program.

Visit: confederationcollege.ca/articulation-agreements for more information.

First Semester

CS 050	College Writing
EL 161	Electrical I
EL 165	Digital I
EL 167	Electronics I
EL 268	Health and Safety Regulations
MA 170	Technology Math I
MC 165	Microsoft Office
AS 115	Success Strategies

Second Semester

EL 269	Introduction to CAD
MA 231	Mathematics II
EL 267	Electronics II
EL 261	Electrical II
EL 211	Installation Methods
EL 210	Prints & Canadian Electrical Code I
CS 219	Communications for Technology

Third Semester

EL 305	Industrial Electronics I
EL 307	Industrial Data Networks
EL 320	Drawings, Specifications & Standards
EL 321	Canadian Electrical Code II
EL 343	Power Systems I
MA 331	Mathematics III
SY 066 OR LV 100	Sociology of Community: The Indigenous Context

Fourth Semester

EL 405	Industrial Electronics II
GE	General Elective
EN 015	Professional Practice
EL 612	Quality Assurance
EL 431	Automation Control Systems I
EL 422	Monitoring & Communication Systems
EL 463	Machines & Drives I

Fifth Semester

MA 431	Mathematics IV
EL 610	HMI/SCADA Systems
EL 548	Building Automation Systems
EL 539	Drawings, Specifications & Standards Adv
EL 538	Renewable Energy & Storage
EL 511	Networks II
EL 509	Automation Control Systems II

Sixth Semester

EL 606	Automation Control Systems III Lab
EL 642	Power Systems II
EL 644	Canadian Electrical Code IV
EL 650	Capstone Project
MA 531	Mathematics V for University Transfer students only
EL 649	Pneumatics & Hydraulics



Have questions? Want to apply?

Contact recruitment@confederationcollege.ca

