



CREENTIAL	PROGRAM CODE	AREA OF INTEREST	LOCATION	DURATION
Ontario College Diploma	Fall: 0337 Winter: 0338	Engineering Technology	Thunder Bay	2 -year

Overview

Ever wonder what it takes to keep complex industrial processes running? Today there are process measurement and control system techniques that ensure precise product consistency and reliability.

Confederation College's Instrumentation Engineering Technician – Process Automation and Control two-year program will provide you with a solid footing in both theory and practice in a modern, cutting-edge laboratory designed to emulate common control systems found in industry. Through coursework, you'll learn the basics of electrical, digital, electronics, computer systems, industrial drawings & specifications, physics, computer software and communications for technology. Our lab features functioning processes employing pneumatic as well as modern microprocessor-based electronic control equipment such as PLC's, Distributed Control Systems, and field networks.



Top Highlights

- Developed in consultation with Canada's leading aerospace companies including Bombardier, Boeing and Magellan Aerospace
- Learn and work in our state-of-the-art lab facilities located in the new Technology, Education and Collaboration Hub
- Learn from experienced faculty who have worked in the industry
- Transfer your innovation, design and other skills to industries including mass transit and car manufacturing



Employment Opportunities

Instrumentation engineering technician's commission, install, calibrate, maintain and repair complex measurement and control systems used in a variety of process control applications. Opportunities exist in the pulp and paper, mining, chemical, petroleum, steel and manufacturing industries; fresh water and waste water management; grain trade; nuclear and thermal generation; biomedical equipment manufacturers; and sales and technical service of instrumentation equipment.



Experiential Learning

Optional Co-op



Tim ten Have Program Coordinator

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Instrumentation Engineering Technician - Process Automation and Control

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).

Other Courses Required

- 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 program-Technology/Aviation 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.

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

First Semester

CS 050 College Writing
EL 161 Electrical I
EL 165 Digital I
EL 166 Computer Systems
EL 167 Electronics I
GE General Elective
MA 133 Mathematics I
MC 165 Microsoft Office

Second Semester

CS 219 Communications for Technology
EL 261 Electrical II
EL 267 Electronics II
EL 268 Health and Safety Regulations
EL 269 Introduction to CAD
MA 231 Mathematics II
PH 210 Physics

Select one of the following:

LV 100 History of Indigenous Canadian Relations
SY 066 Sociology of Community:
The Indigenous Context

Third Semester

EL 305 Industrial Electronics I
EL 362 Computer Software I
EL 365 Digital II
GE General Elective
IT 345 Field Instrumentation
IT 346 Practical Instrumentation I
IT 347 Final Control Elements
MA 331 Mathematics III

Fourth Semester

EL 307 Industrial Data Networks
EL 405 Industrial Electronics II
EL 406 Embedded Control Systems I
EL 431 Automation Control Systems I
EL 611 Professional Practice and Law
EL 612 Quality Assurance
IT 445 Process Control Applications
IT 446 Practical Instrumentation II



Have questions? Want to apply?
Contact recruitment@confederationcollege.ca

