



CREENTIAL	PROGRAM CODE	AREA OF INTEREST	LOCATION	DURATION
Ontario College Diploma	Fall: 0319	Engineering Technology	Thunder Bay	2 -year

## Overview

Anywhere you find people or resources you will find employment opportunities for Civil Engineering Technicians.

Civil Engineering Technicians are responsible for providing the infrastructure that makes our society work. As a student in our two-year program, you will examine various construction materials, such as soil, concrete, steel and water that are used in the design and construction of roads, railways, bridges, and buildings.

Students learn to use computer-aided drafting software (AutoCAD, Civil 3D), manual and electronic surveying equipment, project scheduling programs and design software.

Students gain knowledge in lab techniques for assessing construction materials, codes and legal requirements governing design and construction, applying the principles of science and mathematics to real world problems.



### Top Highlights

- Small class sizes mean you will get great practical hands-on experience with industry-standard technologies.
- Balance of classroom study, labs, site visits and field work for a well-rounded education with engaged instructors.
- With a planned work placement and optional summer co-op, many students secure full-time employment at their placement organizations prior to graduation.
- Recognized by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT).



### Employment Opportunities

Surveyor, Drafter, Designer, Materials Testing Technician, Construction Inspector, Estimator, Project Management, Site Supervisor, Contract Administrator

Employment opportunities in this industry are available locally, regionally and around the world. As a graduate of this program, you will find entry-level opportunities with consultants, contractors, and government. With experience you can expect to move on to management positions within these organizations.



### Experiential Learning

Optional Co-op, Field Work



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# Civil Engineering Technician

## 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, you are encouraged to apply for the Pre-Technology program - Technology/Aviation to facilitate success in your technology path.

## First Semester

CE 110 Statics I  
CE 125 Construction Materials and Methods  
CE 130 Introductory Surveying  
CE 140 Basic Drafting  
CS 050 College Writing  
MA 133 Mathematics I  
MC 165 Microsoft Office

## Second Semester

CE 200 Occupational Health & Safety  
CE 210 Statics II  
CE 230 Advanced Surveying (Field School)  
CE 240 Construction Drawing with CAD  
CS 219 Communications for Technology  
MA 231 Mathematics II

Select one of the following:  
SY 066 Sociology of Community:  
The Indigenous Context  
LV 109 Indigenous Identity in Relation to Land

## Third Semester

CE 310 Strength of Materials  
CE 235 Construction Management I  
CE 335 Construction Planning  
CE 345 Geomatics  
CE 350 Soil Mechanics I  
CE 355 Computer Applications in Civil Engineering  
GE General Elective

## Fourth Semester

CE 401 Work Experience  
CE 411 Steel Design  
CE 412 Concrete Design  
CE 515 Highway Construction  
EN 015 Professional Practice  
CE 425 Materials Testing  
CE 320 Hydraulics  
GE General Elective



**Have questions? Want to apply?**  
Contact [recruitment@confederationcollege.ca](mailto:recruitment@confederationcollege.ca)

