# **Civil Engineering Technician**





**CREDENTIAL** Ontario College Diploma PROGRAM CODE Fall: 0319 AREA OF INTEREST Engineering Technology LOCATION Thunder Bay DURATION 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).



**Experiential Learning** Optional Co-op, Field Work



## **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.



#### Lesley Dell Program Coordinator

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This is LEARNING for this



#### 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).

## **Additonal 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.

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First Semester		
CE 110 CE 125 CE 130 CE 140 CS 050 MA 133 MC 165	Statics I Construction Materials and Methods Introductory Surveying Basic Drafting College Writing Mathematics I Microsoft Office	
Second Semester		
CE 200 CE 210 CE 230 CE 240 CS 219 MA 231	Occupational Health & Safety Statics II Advanced Surveying (Field School) Construction Drawing with CAD Communications for Technology 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**



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