

CIVIL ENGINEERING TECHNICIAN (CVTN)

Ontario College Diploma | 4 semesters | Barrydowne

You will acquire the skills and knowledge to become a member of civil engineering teams that are responsible for planning, costing, building, maintaining, and rehabilitating roads, bridges, buildings, water distribution systems, and pipelines. Courses are focused on applying professionalism towards drafting, surveying, construction methods, costing, quality control, inspections, and laboratory testing.

The College's computer-aided drafting (CAD) laboratories provide you with practical, hands-on experience. You will also receive surveying training with electronic distance and angle measuring equipment that will be interfaced with coordinate geometry and drafting software. In addition, to meet the demand for structural steel detailers, you will learn automated structural detailing.

You are able to volunteer for community events such as the "Construction competition" that benefits the local food bank, and in second year, you will compete in a headframe competition where you will design, build, and test a structure to failure during Cambrian's Spring Open House.

Program Highlights

- 2 years – 4 semesters
- Industry-experienced faculty
- Two-week surveying course at the end of the second semester
- Opportunity to gain summer employment through the Infrastructure Opportunities Partnership (IOP)
- Courses cover drafting, surveying, construction methods, costs, quality control, and inspections
- Gain extensive experience using computer-aided drafting (CAD)
- Graduates can seek membership with OACETT (Ontario Association of Certified Engineering Technicians and Technologists) to become certified as a C.Tech. (Certified Technician)

Fieldwork/Placement

You will participate in a two-week field camp during the first part of May at the end of the second semester (SA approved safety boots mandatory). Attendance is compulsory to complete the program. Students are urged to let employers know that they are not available for summer employment until the course is officially completed.

4D Learning Opportunities

CANstruction competition – Students compete against other organizations in the community to design and build a 3D structure out of food cans, which are then donated to the Sudbury Food Bank.

Quick Links

How to Apply (<http://cambriancollege.ca/apply>)

Engineering Technology (<http://cambriancollege.ca/field-of-study/engineering-technology>)

Admission Requirements

For graduates of the new curriculum (OSS): Ontario Secondary School Diploma (30 credits) or equivalent or mature student status, including:

- Any grade 12 English (C), (U), or (M)
- Any grade 12 mathematics (C) or (U) (MCT4C is highly recommended)

Recommended:

- Any grade 12 physics (C), (U)
- Computer competency in relevant software

APPLY NOW! (<http://ontariocolleges.ca/apply>)

Program Delivery

2017-2018

Fall Term Start

This program will be delivered in the following terms

For specific term start/end dates and other key dates/deadlines, please see the 2017-18 Academic Schedule which will be posted on our website in early 2017.

Program of Study

Every academic year, students are required to successfully complete an online Student Safety Regulations and General Safety Standards course. This course must be completed prior to entering the labs (as identified in the table below) in the Schools of Skills Training, Engineering Technology and Environmental Studies.

Semester 1		Credits
CIV 1200	Concrete Asphalt ¹	4
CIV 2331	Construction Technology	4
ENG 1002	College Communications	3
MTH 1050	Algebra I	3
SUR 1116	Surveying I ¹	5
The following General Education course:		3
BUS 1015	Negotiation Labour Relations	3
Term Credits:		22
Semester 2		Credits
CAD 1001	Engineering Graphics	3
ENG 1754	Technical Communication II	3
MCH 1205	Mechanics	5
MTH 1250	Algebra II	3
SUR 1220	Surveying II ¹	5
SUR 1232	Survey Field Methods	1
One of the following General Education courses:		3
BUS 1008	Personal Finance	3
ENV 2416	Environmental Sustainability	3
SSC 1000	Media and Current Events	3
Term Credits:		23
Semester 3		Credits
CAD 1200	Computer Aided Drafting II	2
CIV 2300	Soil Mechanics I ¹	4
CIV 2302	Civil Engineering Applications	3

CIV 2421	Basic Hydraulics	3	jeff.walker@cambriancollege.ca
MCH 2310	Strength Of Materials I	4	
MTH 2325	Technical Math III	3	
Term Credits:		19	
Semester 4			
CIV 2405	Structural Behaviour Detailing	5	
CIV 2408	Computer Aided Structural Detailing	2	
CIV 2431	Municipal Planning	4	
CIV 3500	Special Projects ¹	4	
CIV 3520	Contracts Law Specifications	4	
One of the following General Education courses:		3	
ECN 1002	Economics	3	
FIT 1115	Health Wellness	3	
SCI 1000	Issues and Ethics in Science	3	
Term Credits:		22	
Total Credits:		86	

¹ Course with Lab Component

Tuition and Ancillary Fees

Please see our fees page (<http://cambriancollege.ca/fees>) for the breakdown of tuition and mandatory ancillary fees by program and semester for both domestic and international students.

Books & Supplies

The cost of books and supplies for Year 1 is approximately \$1,700. This is the best information available at the time of publishing to the website and is subject to change.

Employment Opportunities

Civil Engineering Technicians usually work in surveying, material testing, drafting, construction, inspection, or sales and service. Graduates may find employment in:

- Consulting engineering firms
- Government departments
- Municipal engineering departments
- Construction firms

For more information about Civil Engineering as a career, including employment opportunities, visit Ontario Civil Construction Careers Institute (<http://www.myocca.ca>).

Furthering Your Studies

Graduates of Cambrian's CVTN program may apply to enter directly into Semester 5 of the Civil Engineering Technology (CVTY) program. This is a competitive process.

University Degree Opportunities

Graduates of this program may continue their studies at university and may receive credit for their prior College education.

Refer to College/University Agreements (<http://www.cambriancollege.ca/agreements>) for further information.

Contacts

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