

CIVIL ENGINEERING TECHNOLOGY (CVTY)

Create your vision of how the world should be constructed

Go beyond the solid foundation of the Civil Engineering Technician program with our nationally-accredited program. Expand your knowledge with highway, structural, hydraulic, and foundation design as you prepare to become a leader of civil engineering teams. Make your vision reality with courses focused on professionalism, asset and project management, research, and technical report writing. You'll also gain hands-on experience in Geographic Information Systems (GIS), their surveys, and associated applications.

As an accredited program, your Technical Report is credited towards certification with the Ontario Association of Certified Engineering Technicians and Technologists (OACETT). Graduates qualify to work anywhere in Canada. Pathways available to graduates include the pursuit of a civil engineering degree or a license with the Association of Ontario Land Surveyors (AOLS).

Program highlights

- Nationally-accredited program through Technology Accreditation Canada (TAC) (<https://www.technologyaccreditation.ca/Landing/>)
- Graduates may seek membership with the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) for their Certified Engineering Technologist (C.E.T.) professional designations
- Learn from industry-experienced faculty and get hands-on experience in our modern labs
- Two-week surveying field camp provides experiential learning, confidence, and leadership skills in a team setting
- Optional competitive Infrastructure Opportunities Partnership (IOP) and co-op programs to work in industry
- Option to pursue a license with the Association of Ontario Land Surveyors (AOLS)
- Compete against classmates in the annual mine headframe design and building competition in second year

Program of study for 2026-27 Academic Year

Students are required to successfully complete an online Lab Safety course (in Moodle) when starting their program at Cambrian. 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
One General Education course. ²		3
Credits		22
Semester 2		
CAD 1001	Engineering Graphics	3

ENG 1754	Technical Communication	3
MCH 1205	Mechanics	5
MTH 1250	Algebra II	3
SUR 1220	Surveying II ¹	5
SUR 1233	Survey Field Methods	2
One General Education course. ²		3

Credits **24**

Semester 3

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
MCH 2310	Strength Of Materials I	4
MTH 2325	Technical Math III	3
ENV 1027	Sustainable Practices	3

Credits **22**

Semester 4

CIV 2431	Municipal Planning	4
CIV 2403	Structural Behaviour & Detailing	4
CIV 2404	Computer Aided Structural Detailing	3
CIV 3500	Special Projects ¹	4
CIV 3520	Contracts Law & Specifications	4
One General Education course. ²		3

Credits **22**

Semester 5

CIV 2410	Soil Mechanics II	4
CIV 2430	Municipal Services	4
CIV 3510	Structural Design	4
MCH 2410	Strength Of Materials II	4
CIV 3560	Construction Project Management	3
TEC 3501	Technical Report Research	1
CIV 3511	Infrastructure Asset Management	3

Credits **23**

Semester 6

CIV 3600	Foundations	5
CIV 3630	Reinforced Concrete	4
CIV 3640	Highway Design	4
GIS 3600	GIS Applications	3
MTH 2332	Applied Calculus	3
TEC 3601	Technical Report	1

Credits **20**

Total Credits **133**

¹ Course with Lab Component

² For more information regarding General Education courses, click here (<https://cambriancollege.ca/general-electives/>).

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

Additional admission requirements

Recommendations

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

Program delivery

2026-2027

Fall term start

SEMESTER 1: Fall 2026

SEMESTER 2: Winter 2027

SEMESTER 3: Fall 2027

SEMESTER 4: Winter 2028

SEMESTER 5: Fall 2028

SEMESTER 6: Winter 2029

Specific program pathways

College or university degree opportunities

If you are a graduate of this program, you may continue your studies at a college or university and you may receive credit(s) for your prior college education. Refer to Cambrian's college and university agreement (<https://cambriancollege.ca/supports-services/articulation-agreements/universities-in-canada/>) details for further information.

Employment opportunities

Civil Engineering Technologists usually work the design, management and implementation of projects. Graduates are prepared for employment opportunities with:

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

For more information about Civil Engineering as a career, including employment opportunities, and more, visit OCCA (<https://www.myocca.ca/>).

Contacts

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INTERNATIONAL ADMISSIONS

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