

MINING ENGINEERING TECHNICIAN (MNTN)

Ontario College Diploma | 4 semesters | Barrydowne Campus

The mining industry is dynamic and ever-changing, and Cambrian's Mining Engineering Technician program will challenge you to explore why and how things work and to find innovative solutions to problems.

As you learn and live in one of the mining centres of the world, you will prepare to become part of mining engineering teams responsible for a wide range of projects involving surveying, drafting, design, environmental studies, industrial geological and geophysical fieldwork, ventilation, ground control, and supervision.

Industry-experienced faculty members will guide your progress and understanding through examples gained from industry experience, field trips in the renowned Sudbury basin and surrounding area, and hands-on demonstrations. You will benefit from a variety of experiential learning opportunities, including activities at an active mine site to gain a broad understanding of the various aspects of mining engineering as well as communication and leadership skills.

Upon completion of the technician diploma, you may choose to continue your studies in the mining engineering technology advanced diploma program (MNTY).

Program Highlights

- 2 years – 4 semesters
- Gain a solid foundation in surveying, geology, AutoCAD, mine development, mine ventilation, and more
- 10-day field school at the end of the second semester
- Field trips to mine sites and/or mining suppliers when available
- Networking opportunities including CIM-Sudbury Student Night event

Fieldwork/Placement

There is a field school for 10 days following the end of the second semester. Students complete applied projects related to study areas within the mining program.

Accreditation

Cambrian's Mining Engineering Technology program is accredited by Technology Accreditation Canada (TAC), which includes the curriculum of the Mining Engineering Technician program.

In addition, our graduates are recognized by The Ontario Association of Certified Engineering Technicians and Technologists (OACETT), which will give you access to career development opportunities and a national network of engineering professionals.

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

Recommended:

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

Missing an Admission Requirement? We can help! APPLY NOW!
Visit <https://www.cambriancollege.ca/upgrading/> for more information about our **FREE Academic Upgrading Program**.¹

APPLY NOW! (<https://www.ontariocolleges.ca/en/apply-now/>)

¹ Please note Academic Upgrading is only available for domestic students.

Program Delivery 2024-2025

This program will be delivered in the following terms:

Fall Term Start

1. **SEMESTER 1** Fall 2024
2. **SEMESTER 2** Winter 2025
3. **SEMESTER 3** Fall 2025
4. **SEMESTER 4** Winter 2026

Winter Term Start

1. **SEMESTER 1** Winter 2025
2. **SEMESTER 2** Spring 2025
3. **SEMESTER 3** Fall 2025
4. **SEMESTER 4** Winter 2026

For specific term start/end dates and other key dates/deadlines, please see the Academic Schedule (<http://cambriancollege.ca/apply/how-to-apply/academic-schedule/>) on our website.

Program of Study for 2024-25 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
ENG 1002	College Communications	3
GEO 1100	Geology I ¹	4
MTH 1050	Algebra I	3
MNG 1101	Introduction to Mining ¹	3
CHM 1206	Chemistry for the Geosciences	3
MNG 1130	Surveying I - Mining	4
One General Education course. ²		3
Credits		23

Semester 2

ENG 1754	Technical Communication	3
MNG 1014	Mineral Resources Field Camp ¹	1
CAD 1001	Engineering Graphics	3
GEO 1212	Geology II ¹	3
MNG 1200	Mining Methods ¹	4
MTH 1250	Algebra II	3
MNG 1230	Surveying II - Theory	3
MNG 1231	Surveying II - Lab	3
Credits		23

Semester 3

GEO 2305	Geological Field & Data Collection ¹	5
MTH 2325	Technical Math III	3
MNG 2301	Mining Health and Safety ¹	3
MNG 2341	Mine Layouts and Planning ¹	4
MNG 2303	Mine Equipment ¹	3
MNG 2340	Technical Computer Applications ¹	3
One General Education course. ²		3
Credits		24

Semester 4

GEO 2420	Intro To Structural Geology ¹	4
MNG 1015	Ground Control ¹	4
MNG 2435	Applied Mine Survey and GIS ¹	3
MNG 2302	Mine Blasting Techniques	3
MNG 2430	Mineral Resources and Economics ¹	4
MNG 2426	Mine Services and Vent I	4
One General Education course. ²		3
Credits		25
Total Credits		95

¹ Course with Lab Component

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

Fees

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 \$1,500, including an estimated \$650 for mandatory Personal Protective Equipment. This is the best information available at the time of publishing to the website and is subject to change.

Graduate Options

Furthering Your Studies

Graduates of Cambrian's MNTN program may apply to enter directly into Semester 5 of the Mining Engineering Technology (MNTY) program.

Employment Opportunities

Graduates may find employment in mineral resources exploration or in the operations of surface or underground mines. Graduates may be

employed in a mine engineering office or in mine production. Some graduates may find work in more specialized areas such as:

- Mine Surveying
- Ground control
- Mine ventilation
- Mine safety
- Field exploration
- Mine Geology
- Mine Planning

Graduates of this program may apply to continue into Cambrian College's Mining Engineering Technology advanced diploma program or seek job opportunities in the mining and mineral resources industry.

College/University Degree Opportunities

Graduates from this program may continue their studies at college/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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