

MINING ENGINEERING TECHNICIAN (MNTN)

Ontario College Diploma | 4 semesters | Barrydowne

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
- Annual Mining Day conference provides networking opportunities with industry professionals

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.

4D Learning Opportunities

Mining Day Conference – Each year, Cambrian College, Laurentian University, and Collège Boréal students spend the day networking with industry guest speakers and hearing about the latest trends and issues in the mining industry.

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)
- Computer competency in relevant software

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

Program Delivery

2022-2023

This program will be delivered in the following terms:

Fall Term Start

1. SEMESTER 1 Fall 2022
2. SEMESTER 2 Winter 2023
3. SEMESTER 3 Fall 2023
4. SEMESTER 4 Winter 2024

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 2022-23 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 |
| MNG 1100 | Introduction to Mining ¹ | 4 |
| MTH 1050 | Algebra I | 3 |
| SUR 1116 | Surveying I ¹ | 5 |
| One General Education course. ² | | 3 |
| | | 22 |
| Semester 2 | | Credits |
| CAD 1001 | Engineering Graphics | 3 |
| ENG 1754 | Technical Communication | 3 |
| MNG 1014 | Mineral Resources Field Camp ¹ | 1 |
| GEO 1212 | Geology II | 3 |
| MNG 1200 | Mining Methods | 4 |
| MTH 1250 | Algebra II | 3 |
| SUR 1225 | Mine Surveying ¹ | 5 |

| | | |
|--|---|-----------|
| CHM 1206 | Chemistry for the Geosciences | 3 |
| Credits | | 25 |
| Semester 3 | | |
| GEO 2305 | Geological Field & Data Collection ¹ | 5 |
| MTH 2325 | Technical Math III | 3 |
| MNG 1019 | Maintenance Planning | 4 |
| MNG 2301 | Mining Health and Safety | 3 |
| MNG 2340 | Technical Computer Applications | 3 |
| MNG 2335 | Mine Layouts and Planning | 5 |
| One General Education course. ² | | 3 |
| Credits | | 26 |
| Semester 4 | | |
| GEO 2420 | Intro To Structural Geology ¹ | 4 |
| MNG 1015 | Ground Control ¹ | 4 |
| MNG 2300 | Mine Blasting Techniques ¹ | 4 |
| MNG 2425 | Mine Services and Vent I | 3 |
| MNG 2435 | Applied Mine Survey and GIS | 3 |
| MNG 2430 | Mineral Resources and Economics | 4 |
| One General Education course. ² | | 3 |
| Credits | | 25 |
| Total Credits | | 98 |

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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