

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 challenges 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 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.

You may be required to participate in Service Type Common Core training (requires an employer sign-off for registration) as part of your practical underground learning experience.

Program Highlights

- 2 years – 4 semesters
- Optional 4-month co-op placement
- 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.

An optional Co-op Placement is available for 12-16 weeks following fourth semester.

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), (U), or (M)
- 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! (<http://ontariocolleges.ca/apply>)

Program Delivery

2018-2019

This program will be delivered in the following terms:

Fall Term Start

1. **SEMESTER 1** Fall 2018
2. **SEMESTER 2** Winter 2019
3. **SEMESTER 3** Fall 2019
4. **SEMESTER 4** Winter 2020

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

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 1115 | Surveying I ¹ | 4 |
| CHM 1206 | Chemistry for the Geosciences | 3 |
| The following General Education course: | | 3 |
| BUS 1015 | Negotiation Labour Relations | 3 |
| Term Credits: | | 24 |
| Semester 2 | | |
| CAD 1001 | Engineering Graphics | 3 |
| ENG 1754 | Technical Communication | 3 |
| GEO 1200 | Geology II ¹ | 4 |

| | | |
|---|---|----|
| MNG 1014 | Mineral Resources Field Camp ¹ | 1 |
| MNG 1200 | Mining Methods ¹ | 4 |
| MTH 1250 | Algebra II | 3 |
| SUR 1225 | Mine Surveying ¹ | 5 |
| Term Credits: | | 23 |
| Semester 3 | | |
| GEO 2305 | Geological Field Data Collection ¹ | 5 |
| GEO 2307 | Digital Map Making | 2 |
| MNG 2335 | Mine Layouts and Planning | 5 |
| MTH 2325 | Technical Math III | 3 |
| One of the following Elective courses: | | 4 |
| GEO 2311 | Exploration Geophysics ¹ | 4 |
| MNG 1019 | | 4 |
| One of the following General Education courses: | | 3 |
| POL 1500 | Canadian Political Studies | 3 |
| SOC 1007 | Intro to Indigenous Studies | 3 |
| BUS 3585 | Entrepreneurship | 3 |
| SSC 1000 | Media and Current Events | 3 |
| Term Credits: | | 22 |
| Semester 4 | | |
| GEO 2420 | Intro To Structural Geology ¹ | 4 |
| MNG 1015 | Ground Control ¹ | 4 |
| MNG 2300 | Mine Blasting Techniques ¹ | 4 |
| MNG 2310 | Mine Ventilation ¹ | 4 |
| One of the following Elective courses: | | 4 |
| CHM 1109 | Mineral Processing ¹ | 4 |
| GEO 2434 | Mineral Resource Evaluation ¹ | 4 |
| One of the following General Education courses: | | 3 |
| ECN 1002 | Economics | 3 |
| PSY 2700 | Client Comm. Leadership Develop | 3 |
| BUS 3585 | Entrepreneurship | 3 |
| SSC 1000 | Media and Current Events | 3 |
| Term Credits: | | 23 |
| Total Credits: | | 92 |

¹ Course with Lab Component

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 \$500 for 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. This is a competitive process.

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.

Contacts

Katherine Bruce

Program Coordinator
705-566-8101, ext 7555
katherine.bruce@cambriancollege.ca