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 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 (depending on availability of positions)
• 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 may be available for up to 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) 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! (http://ontariocolleges.ca/apply)

Program Delivery
2020-2021
This program will be delivered in the following terms:

Fall Term Start
1. SEMESTER 1 Fall 2020
2. SEMESTER 2 Winter 2021
3. SEMESTER 3 Fall 2021
4. SEMESTER 4 Winter 2022

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.

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG 1002</td>
<td>3</td>
</tr>
<tr>
<td>GEO 1100</td>
<td>4</td>
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<tr>
<td>MNG 1100</td>
<td>4</td>
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<td>MTH 1050</td>
<td>3</td>
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<td>SUR 1115</td>
<td>4</td>
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<tr>
<td>CHM 1206</td>
<td>3</td>
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<tr>
<td>One General Education course</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
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<tr>
<th>Semester 2</th>
<th>Credits</th>
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<tr>
<td>CAD 1001</td>
<td>3</td>
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<tr>
<td>ENG 1754</td>
<td>3</td>
</tr>
<tr>
<td>GEO 1200</td>
<td>4</td>
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<tr>
<td>MNG 1014</td>
<td>1</td>
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<tr>
<td>MNG 1200</td>
<td>4</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
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MTH 1250  Algebra II  3
SUR 1225  Mine Surveying  5

Semester 3
GEO 2305  Geological Field & Data Collection  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 course.
GEO 2311  Exploration Geophysics  1
MNG 1019  Maintenance Planning
One General Education course.  2

Credits  23

Semester 4
GEO 2420  Intro To Structural Geology  4
MNG 1015  Ground Control  1  4
MNG 2300  Mine Blasting Techniques  4
MNG 2310  Mine Ventilation
One of the following Elective courses:
CHM 1109  Mineral Processing
GEO 2434  Mineral Resource Evaluation  1
One General Education course.  2

Credits  22

One of the following Elective courses:
GEO 2311  Exploration Geophysics  1
MNG 1019  Maintenance Planning

One General Education course.  2

Credits  23

Total Credits  92

1  Course with Lab Component
2  For more information regarding General Education courses, click here (https://cambriancollege.ca/general-education-electives).

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

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