

MINING ENGINEERING TECHNICIAN (MNTN)

Live and learn in one of the world's mining centres

Located in the heart of the mining industry in Sudbury, Ontario, our industry-experienced faculty prepares you to become an active member of mining engineering teams responsible for a wide range of projects in this dynamic and ever-changing industry. You'll explore surveying, drafting, design, mine safety, geological and geotechnical fieldwork, ventilation, ground control, and mine planning.

The program includes hands-on activities at the end of first year where you will gain a broad understanding of the various aspects of mining engineering as well as communication and leadership skills. Upon graduation, you may choose to continue your studies in the mining engineering technology advanced diploma program (MNTY).

Program highlights

- Gain a solid foundation in surveying, geology, AutoCAD, mine development, mine ventilation, and more
- 10-day field school
- Field trips to mine sites and/or mining suppliers when available
- Networking opportunities including the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Student Night event
- Graduates can seek membership with the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) to become certified as a C.Tech. (Certified Technician)

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 | | Credits |
| ENG 1754 | Technical Communication | 3 |
| MNG 1014 | Mineral Resources Field Camp ¹ | 1 |
| GEO 1212 | Geology II ¹ | 3 |
| MNG 1202 | Mine Engineering Graphics | 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-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)
- Any grade 12 chemistry (C) or (U)
- Computer competency in relevant software

Program delivery

2024-2025

Fall term start

SEMESTER 1: Fall 2024
SEMESTER 2: Winter 2025
SEMESTER 3: Fall 2025
SEMESTER 4: Winter 2026

Winter term start

SEMESTER 1: Winter 2025
SEMESTER 2: Spring 2025
SEMESTER 3: Fall 2025
SEMESTER 4: Winter 2026

Specific program pathway

Graduates of Cambrian's MNTN program may apply to enter directly into Semester 5 of the Mining Engineering Technology (<https://>

cambriancollege.ca/programs/mining-engineerig-technology/) (MNTY) program.

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/admissions/academic-planning/pathways/>) details for further information.

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

Contacts

Katherine Bruce

Program Coordinator

705-566-8101, ext 7555

katherine.bruce@cambriancollege.ca