

MINING ENGINEERING TECHNOLOGY (MNTY)

Learn in Sudbury. Work for mining operations anywhere in the world.

Based in Sudbury, one of the nickel mining capitals of the world, our nationally-accredited three-year program guided by industry-experienced faculty members is the only one of its kind in Ontario. You'll gain the solid foundation and hands-on experience to become a crucial component of underground or open-pit mine engineering teams worldwide that are responsible for a wide range of projects, from surveying to geological and geotechnical fieldwork to project management and mine safety.

Your third year includes advanced courses that develop skills in scheduling and estimating, mine ventilation and services, and project management, a skill set highly valued in the industry. You'll complete a 14-week paid co-op placement in the final semester. Accredited by Technology Accreditation Canada (TAC), graduates are recognized by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT).

Program highlights

- Only Mining Engineering Technology program in Ontario
- Field trips to mine sites and/or mining suppliers when available
- Accredited by TAC and recognized by OACETT, giving you access to career development opportunities and national network of engineering professionals
- 14-week paid co-op
- Common first and second year with Cambrian's Mining Engineering Technician program
- Third year includes advanced courses in project management and technical reports
- Grads are eligible to join the Ontario Association of Certified Engineering Technicians & Technologists (OACETT) and the Canadian Technical Employment Network (CTEN)

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
GEO 1100	Geology I ¹	4
ENG 1002	College Communications	3
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
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 2303	Mine Equipment ¹	3
MNG 2341	Mine Layouts and Planning ¹	4
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 2430	Mineral Resources and Economics ¹	4
MNG 2426	Mine Services and Vent I	4
MNG 2302	Mine Blasting Techniques	3
One General Education course. ²		3
Credits		25

Semester 5		
MNG 1017	Applied Geomechanics ¹	4
MNG 3531	Scheduling-Estimating/Mine Projects ¹	4
MTH 2332	Applied Calculus	3
TEC 3501	Technical Report Research	1
MNG 3501	Mine Services and Vent II ¹	4
MNG 3547	Applied Mine Design ¹	4
MNG 3508	Mining Project Management ¹	4
Credits		24

Semester 6		
TEC 3601	Technical Report	1
MNG 3650	Mining Co-op Placement	12
Credits		13
Total Credits		132

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
SEMESTER 5: Fall 2026
SEMESTER 6: Winter 2027

Winter term start

SEMESTER 1: Winter 2025
SEMESTER 2: Spring 2025
SEMESTER 3: Fall 2025
SEMESTER 4: Winter 2026
SEMESTER 5: Fall 2026
SEMESTER 6: Winter 2027

Specific program pathways

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/supports-services/articulation-agreements/>) details for further information.

Employment opportunities

Graduates may find employment in the operations of all sizes of underground or open pit mines and may be employed in the mine engineering office or in mine production as a supervisor.

Some graduates may work in more specialized areas such as:

- Rock mechanics
- Mine ventilation
- Project Management
- Mine safety
- Technical sales
- Mine supervision
- Mine administration/contracts

Graduates may elect to work overseas. A career in mining may offer travel opportunities, varied living environments, and experience with other cultures and people.

Contacts

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INTERNATIONAL ADMISSIONS