

# MECHANICAL ENGINEERING TECHNICIAN (METN)

## Ontario College Diploma | 4 semesters | Barrydowne

A Mechanical Engineer's expertise is essential in almost every industry. They can be found working all over the world – innovating, solving problems, and providing insights into all types of machinery.

As a Mechanical Engineering Technician, your computer will be your go-to tool, using programs like AutoCAD and SolidWorks to create and analyze your designs, run simulations, and test how a machine will operate. In our program, you'll have the opportunity to take your 3D designs one step further by producing them in our on-campus labs.

You will also have unique opportunities to put your skills into practice by working on real community and applied research projects in labs that are equipped with state-of-the-art, advanced manufacturing equipment. Manufacturing techniques like 3D printing and CNC machining are processes you'll explore throughout the program.

Extend your studies after graduation by applying to enter directly into the final year of Cambrian's Mechanical Engineering Technology (METY) program. You'll boost your leadership and technical skills and open the door to more career opportunities.

### Program Highlights

- 2 years – 4 semesters
- Graduates are eligible to apply for the final year of Cambrian's Mechanical Engineering Technology program.

### 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
MEC 1003	Engineering Materials	3
MTH 1050	Algebra I	3
PHY 1112	Physical Principles I	4
MEC 1002	Introduction to Metrology and Geometric Dimensioning	3
CAD 1001	Engineering Graphics	3
One General Education Course. <sup>2</sup>		3
<b>Credits</b>		<b>22</b>
Semester 2		Credits
ENG 1754	Technical Communication	3
MTH 1250	Algebra II	3
PHY 1212	Physical Principles II	3
MCH 1207	Fluid Mechanics	4
MCH 1165	Industrial Design I <sup>1</sup>	3
CAD 1003	Solid Modeling <sup>1</sup>	3
MCH 1153	Mechanical Lab I <sup>1</sup>	3
<b>Credits</b>		<b>22</b>
Semester 3		Credits
CAD 1200	Computer Aided Drafting II	2
MTH 2325	Technical Math III	3
MCH 1301	Dynamics of Machines <sup>1</sup>	3
MCH 1303	Strength of Materials	5
MCH 1365	Industrial Design II <sup>1</sup>	3
ELC 1013	Electrical Fundamentals	4
One General Education Course. <sup>2</sup>		3
<b>Credits</b>		<b>23</b>
Semester 4		Credits
CAD 1004	Advanced Solid Modelling <sup>1</sup>	4
INT 1001	Instrumentation I	3
MCH 1002	Thermodynamics	3
MCH 1401	Advanced Structural Design	4
MCH 1402	Materials and Processes	3
MCH 1410	Codes and Standards	3
One General Education Course. <sup>2</sup>		3
<b>Credits</b>		<b>23</b>
<b>Total Credits</b>		<b>90</b>

## 2 Mechanical Engineering Technician (METN)

<sup>1</sup> Course with Lab Component

<sup>2</sup> 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

In your first year, you can expect to spend approximately \$900 on textbooks, materials, and Personal Protective Equipment (PPE). Please note that this does not include any BYOD computer requirements.

## Graduate Options

### Furthering Your Studies

Graduates of Cambrian's METN program may apply to enter directly into Semester 5 of the Mechanical Engineering Technology (METY) program.

This is a competitive process.

### Employment Opportunities

Graduates may find employment in areas such as:

- Consulting engineering firms
- Manufacturing companies
- Resource industries
- Mechanical designer
- Sales representative
- Government departments

### 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

**James Allman**

Program Coordinator

705-566-8101, ext 6284

[james.allman@cambriancollege.ca](mailto:james.allman@cambriancollege.ca)