

# MECHANICAL TECHNICIAN - MANUFACTURING/MACHINING (MMTN)

## Ontario College Diploma | 4 semesters | Barrydowne

Prepare for a career in the machine trades in the manufacturing sector, where you'll design and fabricate a variety of metal parts required to build and maintain industrial equipment and tools. You'll gain knowledge in 3D design, manufacturing, jigs/fixtures for custom production, and computer-integrated manufacturing processes. You will also develop a high level of skill in the operation of manufacturing technologies by putting theory into practice through hands-on training on modern, complex machining equipment.

### Program Highlights

- 2 years – 4 semesters
- Co-op Diploma Apprenticeship option
- Opportunities to participate in applied research projects with industry partners
- 60% of the program is hands-on training in a manufacturing lab on modern, industry-standard equipment
- Training on industrial 3D design and manufacturing software

### 4D Learning Opportunities

Ontario Technological Skills Competition – there are opportunities for select students to compete in this provincial competition against other college students and apprentices.

### Co-op Diploma Apprenticeship Program Option

The Co-op Diploma Apprenticeship program combines a college diploma and apprenticeship training. The placement for this program is an optional co-op and is not required for you to graduate. You can choose to complete your postsecondary program and graduate with a certificate or diploma without participating in the co-op option. However, if you choose, and qualify, to participate in this optional Co-op Diploma Apprenticeship program, you may become a registered apprentice sponsored by your co-op employer. Through your participation in this program, you will have the opportunity to participate in paid co-op placements while earning a college certificate or diploma. Your academic curriculum, which enables you to receive Level 1, Level 2, or Level 3 Trade School completion from the Ministry of Advanced Education and Skills Development after each successful year of schooling, will be enhanced by the experiences from your co-op placements.

### Quick Links

How to Apply (<http://cambriancollege.ca/apply>)

Skills and Trades Training (<http://cambriancollege.ca/field-of-study/skills-and-trades-training>)

## 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 11 mathematics (C), (U), or (M)

### **APPLY NOW!**

## Program Delivery

### 2018-2019

This program will be delivered in the following terms:

#### Winter Term Start

1. **SEMESTER 1** Winter 2019
2. **SEMESTER 2** Spring 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
TEM 1001	Trade Calculations I	2
TEM 1004	Mechanical Drawings Lab	2
TEM 1005	Workshop Technology I	10
MTM 1000	Machine Practices I	2
TEM 1100	Information Technology	2
ENG 1002	College Communications	3
Term Credits:		21
Semester 2		
TEM 1103	Workshop Technology II	10
TEM 1104	Trade Calculations II	2
TEM 1108	Programming/Operations I	2
TEM 1200	Machining Practices II	2
TEM 1210	Mechanical Drawings II	2
The following General Education course:		3
BUS 1008	Personal Finance	3
Term Credits:		21
Semester 3		
MTM 1001	Programming/Operations II Lab	3
MTM 1002	Workshop Technology III	9
MTM 2325	Machining Operations	2
MTM 2330	Jigs and Fixtures	2
MTM 2335	Design and Calculations	2
ENG 1780	Applied Communication II	2
One of the following General Education courses:		3

MUS 1009	Rock Music, Culture Technology	3	705-566-8101, ext 7629
CET 1003	Cybernation	3	andre.roberge@cambriancollege.ca
PSY 1001	Psychology of Evil	3	
SCI 1000	Issues and Ethics in Science	3	
		Term Credits:	23
<b>Semester 4</b>			
MTM 1003	Manufacturing Processes	3	
MTM 2420	CAD Lab	3	
MTM 1004	Manufacturing/Machining Lab	9	
One of the following General Education courses:		3	
CET 1003	Cybernation	3	
MUS 1009	Rock Music, Culture Technology	3	
PSY 1001	Psychology of Evil	3	
SCI 1000	Issues and Ethics in Science	3	
		Term Credits:	18
		Total Credits:	83

## 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. This is the best information available at the time of publishing to the website and is subject to change.

## Graduate Options

### Employment Opportunities

Graduates may find employment in the mining, aerospace, automotive, and appliance manufacturing sectors and beyond as:

- Machinists
- CNC programmers
- Tool and die makers
- Mold makers
- Machine operators
- CNC machinists
- Entry level CAD designers

### 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

**Andre Roberge**  
Program Coordinator