

WELDING AND FABRICATION TECHNICIAN (WFTN)

Ontario College Diploma | 4 semesters | Barrydowne

Working in the College's welding lab, you will take metal fabrication projects from the engineering drawing stage through cutting and forming processes to the welding and inspection phase. You have the option to start your apprenticeship and will also have unique opportunities to put your welding skills into practice by working on real community and applied research projects.

Program Highlights

- 2 years – 4 semesters
- Upon successful completion of our program, your diploma equates to the three levels of theory required towards your apprenticeship Certificate of Qualification.
- Opportunities to participate in applied research projects
- Real-world experience using industry-standard equipment in the College's welding lab to take projects from concept to finished product

4D Learning Opportunities

Ontario Technological Skills Competition – Each year, select Cambrian Welding students compete in this provincial competition against other college students and apprentices.

Pedestrian bridge for Rotary Park – Students worked alongside industry partner Lopes Mechanical to build a 50-foot long bridge for a park in Sudbury.

Material handling loop – Students helped to build components of an industrial training circuit used by Cambrian's Millwright students.

Nature observation deck for Rotary Park – Students volunteered 900 hours to construct a fully-galvanized metal deck for a park in Sudbury.

Optional Paid Co-Op

Our program features an optional, paid co-op directly related to your program of study. During this work-integrated learning experience, you'll apply your skills and knowledge in an actual work environment, giving you industry training that you can showcase to potential employers when you graduate.

You will be required to complete work preparation sessions prior to the work term to help you develop an industry-specific resume and effective interviewing skills. Cambrian's Career Centre (<https://cambriancollege.ca/campus-life/career-centre/>) will support you through this process and will also help you to source and apply for placement opportunities.

International students: Study permits prohibit international students from participating in optional co-ops. However, if you are an international student and are interested in work-integrated learning opportunities, visit Cambrian's Career Centre (<https://cambriancollege.ca/campus-life/career-centre/>) to discuss available options with a career advisor. Opportunities may include volunteer positions or part-time or full-time jobs during academic breaks and/or during the academic year.

Capped Enrolment

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) or (U)
- Any grade 11 mathematics (C), (U), or (M)

Additional Information

There is a testing fee that is determined by the type and number of different welding certifications for which the student wishes to test.

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
MTH 1010	Trade Math I	3
WLD 1001	Blueprint Reading & Drafting I ¹	3
WLD 1003	Metal Trades Practices ¹	3
WLD 1122	Welding Applications I ¹	8
WLD 1131	Welding Processes & Technology I	3
ENG 1002	College Communications	3
	Credits	23
Semester 2		
FAB 1200	Fabrication & Assembly Practices I ₁	4
WLD 1000	Welding Metallurgy	3
WLD 1004	Layout & Template Development I	3
WLD 1006	Drawing/Inter. & Drafting I	4
WLD 1226	Welding Appl. & Practical Skill I ¹	4
	One General Education course. ²	3
	Credits	21

Semester 3

ENG 1780	Applied Communication II	2
FAB 2300	Fabrication & Assembly Practices II ¹	4
WLD 1007	Drawing Interpretation	4
WLD 1009	Welding Processes & Practices	3
WLD 1011	Intro to Steel Detailing	3
WLD 2322	Welding Appl. & Practical Skill II ¹	3
One General Education course. ²		3
Credits		22

Semester 4

FAB 2401	Fabrication & Assembly Practice III ¹	4
LTD 2400	Layout & Template Develop III	2
SSD 2400	Plate & Structural Steel Develop.II ¹	4
WLD 2413	Welding Appl n & Prac'l Skills III ¹	5
WLD 2416	Job Planning & Preparation	2
One General Education course. ²		3
Credits		20
Total Credits		86

¹ Course with Lab Component

² For more information regarding General Education courses, click here (<https://cambriancollege.ca/general-education-electives/>).

Refer to College/University Agreements (<http://www.cambriancollege.ca/agreements/>) for further information.

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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 resources and supplies for Year 1 is approximately \$1,400.

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

Graduate Option**Employment Opportunities**

Employment opportunities in welding and fabrication may exist in any industry where metal fabrication and maintenance are performed, for example:

- Steel fabrication plants
- Manufacturing
- Construction
- Pulp and paper mills
- Mines
- Refineries
- Trades Unions

College/University Degree Opportunities

Graduates from this program may continue their studies at college/university and may receive credit for their prior College education.