WELDING TECHNIQUES

Program: WETC
Credential: Ontario College Certificate
Delivery: Full-time
Length: 2 Semesters
Duration: 1 Year
Effective: Fall 2019
Location: Midland, Owen Sound

Description
Students are provided with the theoretical and practical training to perform most basic welding techniques. At the completion of the program, students are eligible to test for welding tickets based on their level of expertise. It is expected that most of the graduates will be prepared to enter the workforce as a Welder following the successful completion of this program.

Students are exposed to topics including health and safety, blueprint reading and sketching, applied math, communication, shielded metal arc welding, gas metal arc welding, introduction to computers, and all position pipe welding.

Career Opportunities
Graduates may find a range of occupations in the welding field, including manufacturing and fabricating, automotive and heavy equipment production, automation, and construction. Self-employment is another viable option upon graduation.

Program Learning Outcomes
The graduate has reliably demonstrated the ability to:

1. perform work responsibly and in compliance with the Occupational Health and Safety Act;
2. interpret engineering drawings and blueprints and produce basic graphics required by industry;
3. recognize and understand use of welding symbols;
4. use layout and fabrication processes typical to the industry to determine correct form with accuracy;
5. select appropriate tools and devices to perform mathematical calculations and technical measurements for successful completion of a project;
6. perform weld applications utilizing Shielded Metal Arc (SMAW), Flux Core (FCAW) and Gas Metal Arc (GMAW – Mig Welding) welding equipment;
7. use welding techniques according to industry standards;
8. create high quality welds on various types of material and create joints in the flat, horizontal, vertical and overhead positions;
9. identify how to prevent weld defects and define procedures for correction to ensure weld quality;
10. communicate clearly, concisely, and correctly in the written, spoken and visual form that fulfils the purpose and meets the need of the audience;
11. contribute to the development, implementation and maintenance of environmentally sustainable practices within the welding industry;
12. discover business skills and career opportunities that could lead to entrepreneurial opportunities.

The Program Progression

Fall Intake
• Sem 1: Fall 2019
• Sem 2: Winter 2020

Admission Requirements
OSSD or equivalent with
• Grade 12 English (C or U)

Mature students, non-secondary school applicants (19 years or older), and home school applicants may also be considered for admission. Eligibility may be met by applicants who have taken equivalent courses, upgrading, completed their GED, and equivalency testing. For complete details refer to: www.georgiancollege.ca/admissions/policies-procedures/ (http://www.georgiancollege.ca/admissions/policies-procedures)

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may also be considered for admission; refer to the Credit Transfer Centre website for details: www.georgiancollege.ca/admissions/credit-transfer/ (http://www.georgiancollege.ca/admissions/credit-transfer)

Graduation Requirements
10 Program Courses
1 Communications Course
1 General Education Course

Graduation Eligibility
To graduate from this program, the passing weighted average for promotion through each semester, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

Program Tracking

Semester 1

<table>
<thead>
<tr>
<th>Program Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WETC 1000</td>
<td></td>
</tr>
<tr>
<td>WETC 1001</td>
<td></td>
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<tr>
<td>WETC 1002</td>
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<tr>
<td>WETC 1004</td>
<td></td>
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<tr>
<td>WETC 1005</td>
<td></td>
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<tr>
<td>WETC 1013</td>
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120 Hours

Semester 2

<table>
<thead>
<tr>
<th>Program Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>WETC 1006</td>
<td></td>
</tr>
<tr>
<td>WETC 1007</td>
<td></td>
</tr>
<tr>
<td>WETC 1008</td>
<td></td>
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<tr>
<td>WETC 1014</td>
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</tbody>
</table>

70 Hours

Communications Course
Select 1 course from the communications list during registration. 42
General Education Course
Select 1 course from the general education list during registration.  

<table>
<thead>
<tr>
<th>Hours</th>
<th>336</th>
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<tbody>
<tr>
<td>Total Hours</td>
<td>644</td>
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</tbody>
</table>

**Graduation Window**

Students unable to adhere to the program duration of one year (as stated above) may take a maximum of two years to complete their credential. After this time, students must be re-admitted into the program, and follow the curriculum in place at the time of re-admission.

*Information contained in College documents respecting programs is correct at the time of publication. Academic content of programs and courses is revised on an ongoing basis to ensure relevance to changing educational objectives and employment market needs. The college reserves the right to add or delete programs, options, courses, timetables or campus locations subject to sufficient enrolment, and the availability of courses.*