# OYAP: WELDING

**ONTARIO YOUTH APPRENTICESHIP PROGRAM:**
Students will be integrated with regular college apprentices to earn their Level 1 Apprenticeship. This includes alternate delivery in TEAMS and in-person shop time.

**CAMPUS:** Cornwall

**SEATS:** Students from surrounding high schools will participate

**DURATION:** 10 weeks from Tuesday October 13th to Friday December 18th

**SCHEDULE:**

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| Monday: | 230-430 | Weld 1113 | Alt Delivery |
| | 530-730 | Weld 1115 | Alt Delivery |
| | 730-930 | Weld 1116 | M1630 Shop class |
| Tuesday: | 100-400 | Weld 1115 | M1630 Shop class |
| | 430-730 | Weld 1114 | Alt Delivery |
| Wednesday: | 130-430 | Weld 1115 | M1630 Shop class |
| | 530-730 | Weld 1116 | M1630 Shop class |
| Thursday: | 1130-230 | Weld 1117 | M1630 Shop class |
| | 330-430 | Weld 1115 | Alt Delivery |
| | 530-730 | Weld 1113 | Alt Delivery |
| Friday: | 830-1130 | Weld 1111 | Alt Delivery |
| | 1230-230 | Weld 1112 | Alt Delivery |
| | 230-330 | Weld 1116 | Alt Delivery |

**CREDITS EARNED:**

- MTCU LEVEL 1 APPRENTICESHIP – CODE: 456A
- 3 SECONDARY SCHOOL MINISTRY DUAL CREDITS – CODE: TLA4Y
- 7 COLLEGE CREDITS – TOTAL OF 290 HOURS

**COLLEGE CREDITS INCLUDE:**

**WELD 1111** – TRADE PRACTICES (30 hours)
This course focuses on safe material handling, workplace hazards, and various pieces of legislation governing working conditions in the welding and fabrication trade. Students are also introduced to measuring, hand, and power tools and to the basic arithmetic, calculations and systems of measurement routinely used in the workplace.

**WELD 1112** – APPLIED BLUEPRINT READING (40 hours)
This course content addresses basic drawing, sketching, and drafting and introduces layout and fitting in the welding and fabrication trade. Joint types, welding positions, and welding symbols are discussed and applied.

**WELD 1113** – WELDING THEORY (40 hours)
This course focuses on safe material handling, workplace hazards, and various pieces of legislation governing working conditions in the welding and fabrication trade. Students are also introduced to measuring, hand and power tools, and to the basic arithmetic, calculations, and systems of measurement routinely used in the workplace.

**WELD 1114** – MATERIALS AND PROCESS QUALITY (30 hours)
This course content introduces students to distortion, metallurgy, inspection and testing, and weld quality. The fundamental causes of distortion and the inherent effects and corrective measures are discussed. Students are also introduced to the characteristics of metals and alloys and the effects of welding heat. Destructive and non-destructive testing methods are reviewed, and weld quality, welding discontinuity, and welding procedures are explained.

**WELD 1115** – SHEILDED METAL ARC WELDING PRACTICAL I (70 hours)
In this shop course, students safely demonstrate the equipment set-up and the processes for fillet and groove welding of mild steel using the Shielded Metal Arc Welding (SMAW) process. Post-weld operations are performed as are routine and required equipment maintenance procedures.

**WELD 1116** – GAS SHIELDED SEMI-AUTOMATIC WELDING PRACTICAL I (50 hours)
In this shop course, student's safety demonstrate the equipment set-up, selection of consumables, and the processes for fillet and groove welding of mild steel using the Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) processes. Post-weld operations are performed as are routine and required equipment maintenance procedures.

**WELD 1117** - THERMAL CUTTING (30 hours)
This In this course, students set up and operate manual oxy-fuel cutting equipment, plasma arc cutting equipment and air carbon arc gouging equipment in accordance with government safety regulations. Course content highlights safety-related concepts, equipment features and maintenance, cutting processes, and the correction of common cutting faults.

**All students <u>must</u> have steel-toe safety boots to participate in this program.**

**ORIENTATION:** Thursday October 8th @ 10:30 a.m.

**IMPORTANT DATES: FALL SEMESTER**

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|---|---|
| Oct. 13th | First day of classes @ SLC (refer to your timetable) |
| TBA | Last day to withdraw without academic penalty |
| Dec. 18th | Classes complete, fall semester ends @ SLC |

**PA DAYS:** During scheduled board PA days, St. Lawrence College classes are still in session.
You are expected to attend if you have an SLC class scheduled on this day.

**SLC.ME – APPLYING TO GRADUATE:**
Students in Level 1 Apprenticeship programs must apply to graduate through SLC.me after successful completion of their college courses. If students apply to graduate they will receive a certificate from St. Lawrence College in the mail *(please ensure your address is current and correct with the Dual Credit/PASS office)*. When students complete their Level 3, students can apply to graduate and attend the convocation ceremony.

**FOR MORE INFORMATION:**
**Website:** stlawrencecollege.ca/dualcredit
**Email us at**: DualCredit@sl.on.ca

**IN PARTNERSHIP WITH:**

*SCWI/PASS / St. Lawrence College /Algonquin Lakeshore Catholic District School Board / Catholic District School Board of Eastern Ontario / Limestone District School Board / Upper Canada District School Board*