Third Period Technical Training

- Welder -

(8 Weeks @ 30 Hours per Week = 240 hours)
Instructor(s):

Darren Stacey  
Chair, Metal Trades  
780-792-2675  
darren.stacey@keyano.ca

Richard Dionne  
780-791-4903  
richard.dionne@keyano.ca

Norman Hennings  
780-791-4902  
norman.hennings@keyano.ca

Randy Ringheim  
780-791-4781  
randy.ringheim@keyano.ca

Office Hours:  
Monday through Friday: 8:00 am - 4:00 pm
Course Description:

In the third Period Technical Training you will learn about:
1. SMAW Three
2. Welds on Mild Steel Plate and Pipe
3. Drawing Interpretation
4. Trade Science

Required Textbooks: (available at Keyano College Bookstore approximately 2 weeks prior to start date)

**Third Period Welder Apprenticeship ILMs**
Alberta Learning
Edmonton: Author, 1998–, SKU 2000308

Welder Program Supplies (Required for all periods):

- Books: *Metals and How to Weld Them* ($19.95)
- Lined paper or notebook
- Pens, pencils, erasers
- Calculator (with no programmable memory; Casio FX 260 is recommended)
- Fire resistant coveralls and/or cotton denim jeans/jacket and welding cap or beanie
- Welding helmet with #10 lens and cutting goggles or face shield with #5 lens
- Chipping hammer, tip cleaners, wire brush, striker
- Two pairs of vise grips
- Ankle high CSA Approved safety boots and non-tinted safety glasses with side shields

Learning Outcomes

Upon success completion of Section One – SMAW Three – you will be able to:

1. Identify stainless steels and welding procedures.
2. Identify nickel alloys and clad steels and their welding procedures.
3. Perform SMAW and oxyfuel cutting procedures on mild steel.

Upon success completion of Section Two – Welds on Mild Steel Plate and Pipe – you will be able to:

1. Perform SMAW in the 2G-5G and 5G positions.

Upon success completion of Section Three – Drawing Interpretation – you will be able to:

1. Interpret structural drawings.
2. Interpret pressure vessel drawings.
3. Interpret piping drawings.
Upon success completion of Section Four – *Trade Science* – you will be able to:

1. Identify the types and uses of non-destructive testing methods.
2. Identify the types and used of destructive testing methods.
3. Describe the metallurgical properties of steel.
4. Identify welding codes, standards and specifications.
5. Demonstrate coaching skills.
6. Be prepared to challenge an Interprovincial examination.

**Grading**

Apprentices must successfully meet three criteria to pass technical training.

1. Minimum 65% Theory Component (cumulative weighted average)
2. Minimum 65% on Practical Component 1
3. Minimum of 70% on Practical Component 2
4. Minimum 50% on every section of study.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weightage</th>
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<tbody>
<tr>
<td>SMAW Three</td>
<td>30%</td>
</tr>
<tr>
<td>Welds on Mild Steel Plate and Pipe</td>
<td>43%</td>
</tr>
<tr>
<td>Drawing Interpretation</td>
<td>17%</td>
</tr>
<tr>
<td>Trade Science</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total Theory Component</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>GTAW Lab/Shop</td>
<td>50%</td>
</tr>
<tr>
<td>SMAW Lab/Shop</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Total P1 Practical Component</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>3G Vertical Butt (GTAW/SMAW)</td>
<td>20%</td>
</tr>
<tr>
<td>45 Degree Butt (SMAW)</td>
<td>20%</td>
</tr>
<tr>
<td>4G Overhead Butt (SMAW)</td>
<td>20%</td>
</tr>
<tr>
<td>2G Horizontal Butt (SMAW)</td>
<td>20%</td>
</tr>
<tr>
<td>Cut Project (Circle)</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total P2 Practical Component</strong></td>
<td><strong>100%</strong></td>
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</table>
Important Phone Numbers

- **Candace Trites, Administrative Assistant**  780-791-4881
  Call Candace if you are going to be absent from class or have any general questions or concerns.

- **Darren Stacey, Chair, Metal Trades**  780-791-4900
  Call Darren if you have any concerns with class work, instructors, or if you need any type of academic accommodations.

  Call your instructor if you need information about class work, schedules or if you need extra help to learn the material.

- **Suzanne Beveridge, Alberta AIT**  1-800-248-4823
  Call Suzanne if you have questions about attendance, apprenticeship, or your employer.

- **Security**  780-791-7911
  Call security if you feel threatened while on campus, to report a fire, if you need a door unlocked, or for parking issues.

- **Office of the Registrar**
  - **Registration Assistants**  780-791-4801
  Call this office if you have questions about fees/tuition or class availability.

- **Student Life Calendar**  [https://calendar.keyano.ca/student/](https://calendar.keyano.ca/student/)
  Refer to the Student Life calendar for events and important dates for students.
IMPORTANT NOTICE

Information Regarding Fees and Procedures

If the address listed on your fee assessment sheets is different from your current address, or if your address changes anytime during the duration of your program, please go to the Student Services Centre and fill out the “Change of Address” form as Keyano College requires a current address for you at all times.

Your Student ID cards are available for pick up in the Office of the Registrar. Please have your Student ID # and photo identification available. Apprentices are required to pick up a new Student ID card every Academic Year.

For information on Awards/Bursaries, please contact the Student Services Center either in person or by phone at (780) 791-4894.

Keyano College is a paid parking facility. Parking passes can be purchased at the Cashier’s Office when you go to pay your program fees.

Parking Fees: (2019-2020)
- 2 Weeks $12.87
- 1 Month $24.77
- 2 Months $39.63

Please ensure that when you are paying your program fees that you indicate to the Cashier whether or not you would like to purchase a parking pass. Unreserved, General Parking is available in lots A, B, E and F. Lots C and D are reserved staff parking. If you park in a reserved spot, you can be ticketed even if you have a hang tag or daily pass. Please see the campus map for locations of the parking lots.

Please Note:

- It is now your responsibility to submit your E.I. forms on your own time. (HRDC no longer comes to the college)

- You can submit your registration on-line http://www100.hrdcdrhc.gc.ca/ae-ei/dem-app/english/home2.html

- Or link from http://www.servicecanada.gov.ca