Third Period Technical Training

- Steamfitter-Pipefitter -

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

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

Brent Hydomako
Instructor, Steamfitter/Pipefitter
780-791-4891
brent.hydomako@keyano.ca

Shawn McCurdy
Instructor, Steamfitter/Pipefitter
780-791-4857
shawn.mccurdy@keyano.ca

Office Hours;
Monday through Friday: 8:00 a.m. – 4:00 p.m.
780-791-4881
Course Description:

In the Third Period Technical Training you will learn about:

1. Low Pressure Steam and Condensate Systems
2. Instrumentation and Trade Technologies
3. Welding Processes
4. Hoist Planning & Cranes
5. Welding Processes
6. Hoist Planning & Cranes
7. Process Diagrams and Mitre Elbow

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

Third Period Steamfitter/ Pipefitter Apprenticeship ILMs and 3rd Year Keyano College hand-out package

IPT Pipe trades manual: Keyano college bookstore

Ordinates for 1000 Pipe intersections: Keyano College Bookstore

IPT's Crane and Rigging Training Manuel: Keyano College Bookstore

Steamfitter-Pipefitter Program Supplies (Required for all periods):

- Binders for ILMs
- Lined paper or notebook
- High quality compass set
- Pens, pencils, erasers
- Calculator (with no programmable memory; Casio FX 260 is recommended)
- Tape measure
- Fire resistant coveralls and/or cotton denim jeans/jacket and welding cap or beanie
- Gauntlet type welding gloves
- Welding shield
- Welding helmet with #10 lens and cutting goggles or face shield with #5 lens
- Chipping hammer, tip cleaners, wire brush, striker
- Vise grips (C Clamp Style)
- Ankle high CSA Approved Safety boots and non-tinted safety glasses with side shields
Learning Outcomes

Upon successful completion of Section One – *Low Pressure Steam and Condensate Systems* – you will be able to:

1. Install and maintain low-pressure steam boilers.
2. Install and maintain low-pressure steam systems.
3. Apply steam tables and gas laws.
4. Install and maintain boiler piping and trim.
5. Install and maintain steam traps.
6. Install and maintain water treatment equipment.
7. Install and maintain specialty steam equipment.

Upon successful completion of Section Two – *Instrumentation and Trade Technologies* – you will be able to:

1. Install and maintain control systems.
2. Use emerging technologies on commercial and industrial sites.

Upon successful completion of Section Three – *Welding Processes* – you will be able to:

1. Use SMAW equipment.
2. Recognize the cause and effect of weld faults.
3. Select mild steel electrodes for SMAW.
4. Cut using the plasma arc.
5. Select filler metal and shielding gases.
6. Use GMAW equipment.

Upon successful completion of Section Four – *Hoist Planning and Cranes* – you will be able to:

1. Use load charts to determine crane selection.
2. Use equipment for lifting and moving loads.
3. Hoist equipment and materials using cranes.

Upon successful completion of Section Five – *Process Diagrams and Mitre Elbows* – you will be able to:

1. Apply process diagrams from schematic to isometrics.
2. Fabricate a compound mitre elbow.
3. Fabricate a piping system.
4. Locate elevations using a builder’s level.
5. Construct a dummy leg.
Schedule

A detailed daily class / shop schedule will be handed out on the first day of each intake.

Grading

Apprentices must successfully meet three criteria to pass technical training.
1. Minimum 65% Theory Component (cumulative weighted average)
2. Minimum 65% on each Practical Component
3. Minimum 50% on every section of study.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure Steam Boilers</td>
<td>22%</td>
</tr>
<tr>
<td>Instrumentation and Trade Technologies</td>
<td>15%</td>
</tr>
<tr>
<td>Welding Processes</td>
<td>25%</td>
</tr>
<tr>
<td>Hoist Planning and Cranes</td>
<td>12%</td>
</tr>
<tr>
<td>Process Diagrams and Mitre Elbow</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Total Theory Component</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Lab/Shop</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total Practical Component</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</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