Fourth Period Technical Training

- Steamfitter-Pipefitter -

(8 Weeks @ 30 Hours per Week = 240 hours)
Fourth Period Technical Training – Steamfitter-Pipefitter

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 Fourth Period Technical Training you will learn about:

1. High Pressure Steam & Condensate Systems
2. Process Piping Systems
3. Job Planning and Critical Lifts
4. Revised Drawings and Projects

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

*Fourth Period Steamfitter/Pipefitter Apprenticeship ILMs* and 4rd Year Keyano College hand-out package

**IPT Pipe trades manual**: Keyano college bookstore

**Ordinates for 1000 Pipe intersections; (2⁰ yr)** 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 – High Pressure Steam and Condensate Systems – you will be able to:

1. Install and maintain high pressure steam boilers.
2. Install and maintain high pressure steam systems.
3. Install and maintain condensing and non-condensing steam systems.
4. Install and maintain exhaust and cascading steam systems.
5. Install and maintain high pressure boiler trim.
6. Install and maintain auxiliary equipment on high pressure systems.
7. Install and maintain pressure vessels.
8. Install and maintain HTHW systems.
9. Install and maintain cooling towers and heat exchangers.

Upon successful completion of Section Two – Process Piping Systems – you will be able to:

1. Install and maintain fire protection systems.
2. Identify the operation of HVACR systems.
3. Install and maintain hydraulic systems.
4. Install and maintain fuel systems.
5. Install and maintain waste water systems.
6. Install and maintain medical gas systems.
7. Install and maintain heat recovery systems.
8. Install and maintain solar and geothermal exchange systems.

Upon successful completion of Section Three – Job Planning and Critical Lifts – you will be able to:

1. Describe the role of the Alberta Apprenticeship and Industry Training Board and the network of industry committees that represent the trades and occupation in Alberta.
2. Use coaching skills when training an apprentice.
3. Use Red Seal products to challenge an Interprovincial examination.
4. Perform critical lifts.
5. Plan for a new construction project.
6. Facilitate commissioning, turnover and start-up procedures.
7. Plan for a maintenance project.
8. Apply quality control (Q.C) measures.

Upon successful completion of Section Four – Revised Drawings and Projects – you will be able to:

1. Fabricate a rolling offset.
2. Interpret a revised drawing package.
3. Fabricate an eccentric reducing tee.
4. Fabricate a concentric lateral wye branch.
5. Fabricate a true wye.
**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>Study Area</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Pressure Steam Boilers</td>
<td>19%</td>
</tr>
<tr>
<td>Process Piping Systems</td>
<td>15%</td>
</tr>
<tr>
<td>Job Planning and Critical Lifts</td>
<td>28%</td>
</tr>
<tr>
<td>Revised Drawings and Projects</td>
<td>38%</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>
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**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