



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

Office Hours:

Monday through Friday: 8:00 am - 4:00 pm

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
- Although classes are scheduled in person, we ask that all students are prepared with the technology required for virtual classes (online) should it become necessary; Computer/laptop, microphone, camera and internet access.

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

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.
2. Perform GTAW in the 1G, 2G, 3G, 5G and 6G position on mild steel.

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.

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 Practical Component 1
3. Minimum of 70% on Practical Component 2
4. Minimum 50% on every section of study.

SMAW Three	30%
Welds on Mild Steel Plate and Pipe	43%
Drawing Interpretation	17%
Trade Science	10%
Total Theory Component	100%
GTAW Lab/Shop	50%
SMAW Lab/Shop	50%
Total P1 Practical Component	100%
3G Vertical Butt (GTAW/SMAW)	20%
45 Degree Butt (SMAW)	20%
4G Overhead Butt (SMAW)	20%
2G Horizontal Butt (SMAW)	20%
Cut Project (Circle)	20%
Total P2 Practical Component	100%

E-Learning

Technology and internet will impact your online learning experience. It's important that you are able to watch an online video and other course materials, take online quizzes, and participant in a live class with your instructor and other students.

Keyano College operates in a Windows based environment and having the correct tools for online learning is important. Here's a list of recommended system requirements for Fall 2020.

Internet Speed

Minimum Internet speeds of 5 Mbps.

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home). Check your internet speed with Fast.com.

System requirements:

Microsoft Windows	Apple
<p>Minimum Requirements:</p> <p>A Windows 10 computer/laptop</p> <ul style="list-style-type: none"> · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software 	<p>Minimum Requirements:</p> <p>A Macintosh (V10.14 and above) computer/laptop</p> <ul style="list-style-type: none"> · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software.
<p>Recommended Requirements</p> <ul style="list-style-type: none"> · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free. 	<p>Recommended Requirements</p> <ul style="list-style-type: none"> · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.
<p>Chromebooks are not recommended as they are not compatible with testing lockdown browsers.</p> <p>A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.</p>	

Specific department requirements:

Business and OA programs require Windows 10.

Other programs may utilize Windows based tools as well.

Computer Software

Students will be able to get access to Microsoft Office 365 for Free using Keyano Credentials by [clicking here](#).

Recording of lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not publish any of the lectures or lecture materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus no student is allowed to publish or sell instructor notes without formal written permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property.

ITS Helpdesk

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.

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.

- **Craig Cail, Construction Trades & Heavy Industrial Chair** **780-715-3902**
Call Craig if you have any concerns with class work, instructors, or if you require 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.

- **Mark Power, Alberta AIT** **780-743-7181**
Call Mark 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/>
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 Bookstore. Current rates can be found at: <https://www.keyano.ca/en/about-us/parking.aspx>

When parking, please be mindful of designated areas ("Reserved", "Metered", etc.) 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>

CLEARWATER CAMPUS MAP

For classroom MAPS please refer to
SAKC STUDENT HANDBOOK

