

CAREER PROFILES

Ironworkers:

Ironworkers fabricate, erect, hoist, install, repair, and service structural ironwork, precast concrete, concrete reinforcing materials, curtain walls, ornamental iron, and other metals used in the construction of buildings, bridges, highways, dams, and other structures and equipment.

Wage/Salary Information:

\$55,100 is the median annual salary found nationally in job-postings.

\$35.54/hour is the median wage reported locally.

Commonly Listed Skills in Job Postings:

- Reading
- Document use
- Safety knowledge
- Writing
- Numeracy
- Measurement skills
- Oral communication
- Thinking
- Problem solving
- Decision making
- Critical thinking
- Job task planning
- Teamwork
- Continuous learning

Job Duties:

Ironworkers read blueprints and specifications to lay out work and unload and position steel units so each piece can be hoisted as needed. Ironworkers erect and install scaffolding, hoisting

equipment, and rigging and signal crane operator to position steel units according to blueprints. They align and weld or bolt steel units in place; erect structural and architectural precast concrete components for buildings, bridges, towers, and other structures; and assemble and erect prefabricated metal structures. Ironworkers also position and secure steel bars or metal mesh in concrete forms to reinforce concrete structures and install ornamental and other structural metalwork such as curtain walls, metal stairways, railings, and power doors.

Working Conditions:

Work takes place in an indoor environment where temperatures may vary. Some work still may take place outside where workers are exposed to various weather conditions.

Ironworkers work with equipment, machinery, or power/hand tools and this may be a source of injury. Workers also risk injury from operating welding equipment.

The workplace may be noisy, which could affect hearing. Also, work locations, such as bridges and towers, may be hazardous.

Career Pathways:

Red Seal certification allows for movement between provinces. Progression to supervisory positions is possible with experience.

Ironworkers are employed by construction ironwork contractors. Below are potential career pathways for ironworkers:

- Bridge Construction Ironworker
- Building Systems Erector
- Iron Structure Erector
- Metal Structure Erector
- Metal Wall Framing Installer
- Ornamental Ironworker
- Precast Concrete Erector
- Reinforcing Ironworker
- Tower Crane Erector

Check out more possible career pathways on [WEexplore](#).

Education and Training Pathways:

If you're interested in becoming an ironworker, you can begin your apprenticeship or attend a local training/education program.

Apprenticeship Details:

Ironworker – Structural and Ornamental

- Certification: Voluntary (not required to practice this profession in Ontario)
- Red Seal: Yes
- Training: 6,000 hours of combined on-the-job and in-class technical training
- In-class training: 720 hours

Individuals interested in pursuing an apprenticeship pathway, should follow these steps:

- 1) Get hired – by an employer/sponsor/union
- 2) Apply online to register as an apprentice at www.ontario.ca/page/start-apprenticeship
- 3) Sign a training agreement with your employer/sponsor and the Employment Ontario apprenticeship office.
- 4) Become a Member of the Ontario College of Trades Apprentices Class at www.collegeoftrades.ca/membership
- 5) Keep a record of the hours you work
- 6) Achieve the competencies listed in your training standard if required in your trade
- 7) Complete all of the training requirements in your trade and you will receive a Certificate of Apprenticeship (CoA).
- 8) Write the Exam for the Certificate of Qualification if required in your trade

If you are currently in high school and would like to begin an apprenticeship, visit oyap.com for more information about the Ontario Youth Apprenticeship Program.

Individuals unsure about whether to pursue an apprenticeship or not, can learn more by visiting www.ontario.ca/page/prepare-apprenticeship

St. Clair College:

Welding Techniques

Admission Requirements:

- OSSD with the majority of courses at the College (C), University (U), University/College (M), or Open (O) level;
- Grade 11 Math (C) or (U)

Academic Credential: One Year – Ontario College Certificate

Professional Certification: N/A

Attendance: In-person

Full-time or Part-time: Full-time

Program Length: 1 year – 2 semesters

Program Cycle: Intake Fall and Winter

Program Cost: \$4,364.61

OSAP Eligible: Yes

Location: 2000 Talbot Road West, Windsor, ON, N9A 6S4

For more information on this program, please visit:

<http://www.stclaircollege.ca/programs/postsec/hvac/>

Windsor Welding Institute:

Welder/Fitter and Welding Technology

Admission/Eligibility Requirements:

- OSSD, GED, or equivalent, or;
- Mature Student Status
- Must successfully complete a superintendent approved qualifying test
- Following training and three years working in the field, welders can qualify for Red Seal trade certification

Academic Credential: Unknown

Professional Certification:

- Training and testing to T.S.S.A. and C.W.B. Certification in Shielded Metal Arc Welding
- Training and testing to T.S.S.A. Certification in Gas Tungsten Arc Welding
- Training and testing to C.W.B. Certification in Gas Metal Arc Welding

Attendance: In-person

Full-time or Part-time: Full-time

Program Length:

- Pipe Welder Program (35 weeks)
- Welding Technology Program (32 weeks)

Program Cycle: Continuous Enrolment (can begin classes on any Monday)

Program Cost: Unknown

OSAP Eligible: No

Location: 2710 Meighen Road, Windsor, N8W 4C8

For more information on this program, please visit:

<http://windsorwelding.com/program/welderfitter-and-welding-technology/>

Disclaimer: *The educational institution reserves the right to change information without notice, and may result in discrepancies between their information and the information presented above. If any errors are found, please report them to info@workforcewindsoressex.com.*