



# **IRONWORKER (GENERALIST)**

## **Occupation Description**

"Ironworker (Generalist)" means a person who rigs, welds, burns, rivets, bolts, drills, fits and fabricates or otherwise handles structural shapes and plates in the erection, demolition, repair and routine maintenance of steel structures, such as buildings, towers, cranes, and bridges, and is involved with placing or moving machinery, curtain wall, window wall, tilt-up, column cladding, architectural metal, the detailing, placing, post-tensioning, pre-stressing and tying of reinforcing steel or cable including the unloading and handling of all such material in the field for work as is usually performed by a journeyperson Ironworker.

For detailed information on the scope of knowledge and skills taught and assessed in this program refer to the Program Outline, available on the SkilledTradesBC website.

### Pathways to Certification

In BC, an individual can become certified as an Ironworker (Generalist) by completing the Ironworker (Generalist) program or by challenging the certification. Apprenticeship programs are for individuals who have an employer to sponsor them and challenge programs are for individuals who have extensive experience working in the occupation and wish to challenge the certification.

Youth can begin an apprenticeship in high school through the Youth Train in Trades or Youth Work in Trades programs. The Youth Work in Trades program is available for any trade if an employer is willing to sponsor the student. Trades offered through the Youth Train in Trades vary by region; contact your local school district to find out which technical training programs are being offered through the Youth Train in Trades program in your region.

Foundation programs, where available, provide adults and youth who do not have work experience or employer sponsorship with an opportunity to gain the knowledge and skills needed to enter the occupation. Individuals who wish to enroll in a Foundation program must register directly with the training provider.

## **Recommended Education**

The following education is recommended for apprentices entering this occupation. These are not prerequisites, but rather a desired level of skill or knowledge that will contribute to success in the industry.

- Grade 10 or equivalent including English 10, Mathematics 10 & Science 10
- Preferred: Grade 12

### SkilledTradesBC Registration

Individuals who wish to begin an apprenticeship in this program must register with SkilledTradesBC along with their sponsors. Application forms for all programs are available from the SkilledTradesBC website. Online registration is also available for most programs through the SkilledTradesBC website.

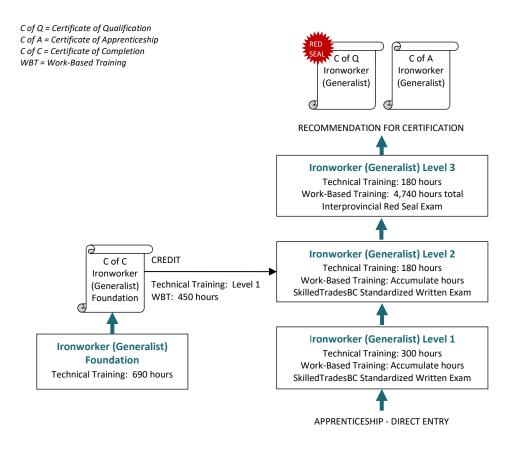
Those who wish to challenge the Ironworker (Generalist) certification must complete the Ironworker (Generalist) Challenge Application and submit it to SkilledTradesBC. Challenge applications are assessed for proof of workplace hours and scope of experience prior to acceptance of the individual into the Challenge pathway.





## **Apprenticeship Pathway**

This graphic provides an overview of the Ironworker (Generalist) apprenticeship pathway.



CROSS-PROGRAM CREDITS

Individuals who hold the credentials listed below are entitled to receive partial credit toward the completion requirements of this program

None





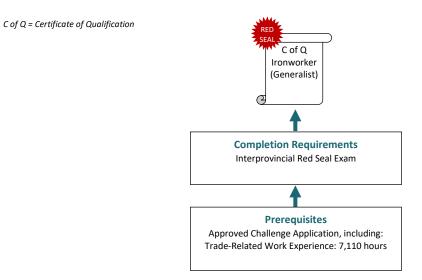
	Apprenticeship Program S	andards		
Credentials Awarded	<ul> <li>Ironworker (Generalist) – Certificate of Qualification with Interprovincial Red Seal endorsement</li> </ul>			
	<ul> <li>Ironworker (Generalist) – Certificate of Apprenticeship</li> </ul>			
SkilledTradesBC Registration Prerequisites	<ul> <li>Agreement signed by the employer to sponsor the apprentice</li> </ul>			
Completion Requirements	Certification as an Ironworker (Generalist) is awarded upon successful completion of:			
	Requirement	Level of Achievement Required		
	Technical Training	<ul> <li>Minimum 70% in each level of technical training:</li> <li>Level 1: 300 hours and SkilledTradesBC Standardized Written Exam</li> </ul>		
		<ul> <li>Level 2: 180 hours and SkilledTradesBC Standardized Written Exam</li> </ul>		
		• Level 3: 180 hours		
	Interprovincial Red Seal Exam	<ul> <li>Minimum 70%</li> </ul>		
	Work-Based Training	• 4,740 hours		
	Recommendation for Certification	<ul> <li>Recommendation for certification signed by the Sponsor and an individual holding credentials eligible for sign-off authority</li> </ul>		
Program Duration	Duration varies depending on how training is delivered, but the program generally takes 3 years to complete.			
	The technical training requirement is typically met through block-release training (full- time, at school) delivered by a SkilledTradesBC-approved training provider. It can also be met through approved alternative training models (e.g., distance education, online, part- time) and/or level challenge where these options are available.			
Sign-off Authority	Credentials eligible to sign-off on the Recommendation for Certification:			
	<ul> <li>Ironworker (Generalist) – Certificate of Qualification</li> </ul>			
	<ul> <li>Ironworker (Generalist) - Interprovincial Red Seal endorsement</li> <li>SkilledTradesBC-issued letter authorizing supervision and sign-off of apprentices in this occupation</li> </ul>			
Challenging a Level	The following levels of technical training can be challenged for advanced placement in th program:			
	<ul> <li>None</li> </ul>			
Cross-Program Credits	Individuals who hold the credentials listed below are entitled to receive partial credit toward the completion requirements of this program			
	Credential	Credit(s) Granted		
	None	• N/A		





## **Challenge** Pathway

This graphic provides an overview of the Ironworker (Generalist) challenge pathway.



#### CREDIT FOR PRIOR LEARNING

Individuals who hold the credentials listed below are entitled to receive partial credit toward the completion requirements of this program

#### None

	Challenge Program Standards		
Credentials Awarded	Ironworker (Generalist) – Certificate of Qualification with Interprovincial Red Seal endorsement		
SkilledTradesBC	An approved Challenge Application, which includes:		
Registration Prerequisites	<ul> <li>7,110 documented hours of directly related experience working in the occupation</li> </ul>		
Credit for Prior Learning	Individuals who hold the credentials listed below are considered to have met the prerequisites for challenging this program:		
	• None		
Completion Requirements	Certification as an Ironworker (Generalist) is awarded upon successful completion of:		
	Requirement	Level of Achievement Required	
	Interprovincial Red Seal Exam	<ul> <li>Minimum 70%</li> </ul>	





# **Foundation Program**

Refer to the Apprenticeship pathway diagram for this program to see how the Ironworker (Generalist) Foundation program leads to apprenticeship in this trade.

	Foundation Program Standards		
Credentials Awarded	Ironworker (Generalist) – Certificate of Completion		
Enrollment Prerequisites	Contact training provider. Prerequisites vary between training institutions		
<b>Completion Requirements</b>	<b>s</b> A Certificate of Completion in this program is awarded upon successful completion of:		
	Requirement	Level of Achievement Required	
	Technical Training	<ul> <li>Minimum 70%</li> </ul>	
Program Duration	Duration varies depending on how training is delivered, but program generally takes 23 weeks to complete, assuming 30 hours in school per week		
Credit toward Apprenticeship	<ul> <li>Individuals who complete the Ironworker (Generalist) Foundation program will receive the following credit toward completion of the Ironworker (Generalist) apprenticeship program:</li> <li>Technical Training: Level 1</li> <li>Work-Based Training: 450 hours</li> </ul>		





## **Supporting Documents**

Ironworker (Generalist) Program Outline (2012) – Defines the full scope of knowledge and skills required to competently perform the occupation in BC. Available from the SkilledTradesBC website.

Ironworker – Generalist National Occupational Analysis (2010) – Prepared by industry experts, under the guidance of the federal government, for Red Seal trades to define the national standard of competence for the trade. Available from the Red Seal website: www.red-seal.ca.

### Contacts

SkilledTradesBC manages B.C.'s industry training and apprenticeship programs. Contact SkilledTradesBC Customer service if you have any questions regarding registration, examinations or certification for this program.

Telephone:	778-328-8700	Fax:	778-328-8701
Toll Free (within BC):	1-866-660-6011	Email:	customerservice@skilledtradesbc.ca
Website:	www.skilledtradesbc.ca		

### **Revision History**

The standards for this program were reviewed and/or updated on the dates below.

Program Standards Approved:	March 2002
Updated:	Jan 2006
Updated:	July 2010
Updated:	November 2011
Updated:	August 2016

Program Profiles are updated regularly. Visit www.skilledtradesbc.ca for the most current version.