



# **METAL FABRICATOR (FITTER)**

#### **Occupation Description**

"Metal Fabricator" means a person who interprets drawings and involving the development, layout, marking, cutting, burning, sawing, shearing, punching, rolling, bending, drilling, shaping, forming, straightening, fitting and assembling, reaming, bolting, riveting, welding, testing, inspecting, preparing, priming, painting, rigging, and handling of structural and mechanical fabrications constructed from plates and structural shapes of ferrous and non-ferrous metals in the Metal Fabrication Trade.

*Optional Endorsement:* "Marine Fitter" means a person who is a qualified Boilermaker and/or Metal Fabricator (Fitter) who is able to cut and fit metal plates and other components in the process of assembling, constructing and repairing large vessels in the shipbuilding and repair industry.

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 a Metal Fabricator (Fitter) by completing the Metal Fabricator (Fitter) 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 and Science 10
- Grade 12 preferred

## SkilledTradesBC Registration

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

Those who wish to challenge the Metal Fabricator (Fitter) certification must complete the Metal Fabricator (Fitter) 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.

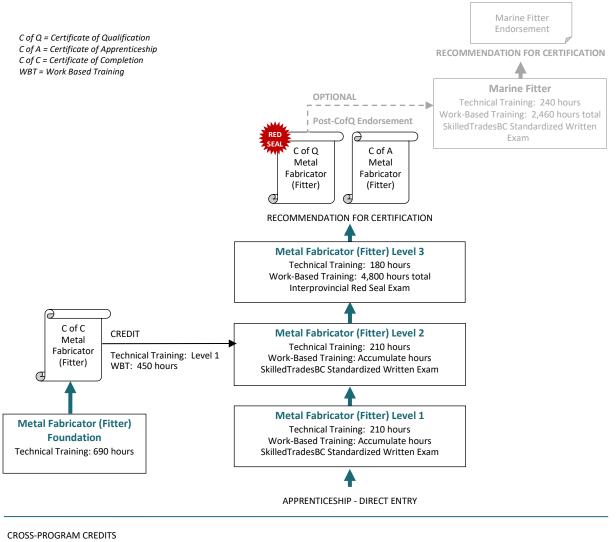
Those who wish to challenge the optional Marine Fitter Endorsement must complete the Marine Fitter Endorsement Challenge Application and submit it to SkilledTradesBC. Challenge applications are assessed for proof of workplace hours and scope of experience prior to acceptance of the individual into the Challenge pathway.



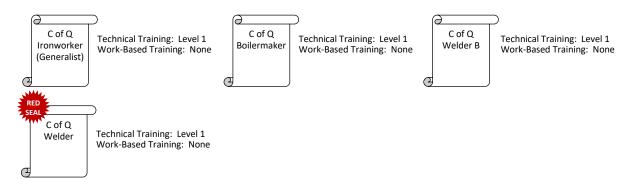


#### Apprenticeship Pathway with Optional Endorsement

This graphic provides an overview of the Metal Fabricator (Fitter) apprenticeship pathway.



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





	Apprenticeship Program Standards		
Credentials Awarded	<ul> <li>Metal Fabricator (Fitter) – Certificate of Qualification with Interprovincial Red Seal endorsement</li> </ul>		
	<ul> <li>Metal Fabricator (Fitter) – Certificate of Apprenticeship</li> </ul>		
	<b>Note</b> : Refer to the Marine Fitter Endorsement Program Standards below to see how this endorsement fits into the apprenticeship pathway for this occupation.		
SkilledTradesBC Registration Prerequisites	<ul> <li>Agreement signed by the employer to sponsor the apprentice</li> </ul>		
<b>Completion Requirements</b>	Certification as a Metal Fabricator (Fitter) 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: 210 hours and SkilledTradesBC standardized written exam</li> <li>Level 2: 210 hours and SkilledTradesBC standardized written exam <i>(when implemented in June 2018)</i></li> <li>Level 3: 180 hours</li> </ul>	
	Interprovincial Red Seal Exam	<ul> <li>Minimum 70%</li> </ul>	
	Work-Based Training	• 4,800 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 years to complete.		
	time, at school) delivered by a Skilled	typically met through block-release training (full- TradesBC-approved training provider. It can also be ining models (e.g., distance education, online, part- uese options are available.	
Sign-off Authority	<ul> <li>Credentials eligible to sign-off on the Recommendation for Certification:</li> <li>Metal Fabricator (Fitter) - Certificate of Qualification</li> <li>Metal Fabricator (Fitter) - Interprovincial Red Seal endorsement</li> </ul>		
	<ul> <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 placemer program:		
	• Level 1		
	• Level 2		





	Apprenticeship Program Standards		
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	
	Ironworker (Generalist) – Certificate of Qualification	<ul><li>Technical Training: Level 1</li><li>Work-Based Training: None</li></ul>	
	Boilermaker – Certification of Qualification	<ul><li>Technical Training: Level 1</li><li>Work-Based Training: None</li></ul>	
	Welder B – Certification of Qualification	<ul><li>Technical Training: Level 1</li><li>Work-Based Training: None</li></ul>	
	Welder – Certificate of Qualification with Interprovincial Red Seal endorsement	<ul><li>Technical Training: Level 1</li><li>Work Based Training: None</li></ul>	





# **Foundation Program**

Refer to the Apprenticeship pathway diagram for this program to see how the Metal Fabricator (Fitter) Foundation program fits into apprenticeship.

	Foundation Program Standards		
Credentials Awarded	Metal Fabricator (Fitter) - Certificate of Completion		
Enrollment Prerequisites	Contact training provider. Prerequisites vary between training institutions		
<b>Completion Requirements</b>	nts 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 690 hours to complete		
Credit toward Apprenticeship	<ul> <li>Individuals who complete the Metal Fabricator (Fitter) Foundation program will receive the following credit toward completion of the Red Seal Metal Fabricator (Fitter) apprenticeship program:</li> <li>Technical Training: Level 1</li> <li>Work-Based Training: 450 hours</li> </ul>		





## Marine Fitter Endorsement Program

Refer to the Apprenticeship pathway diagram for this program to see how the Marine Fitter Endorsement program fits into the apprenticeship pathway for this occupation.

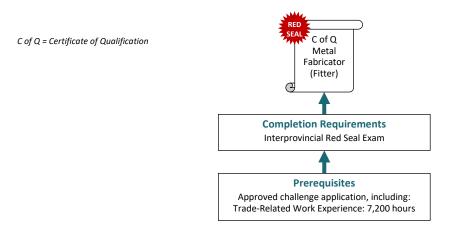
	Marine Fitter Endorsement Program Standards		
Credentials Awarded	Marine Fitter Endorsement		
SkilledTradesBC Registration Prerequisites	<ul> <li>Agreement signed by the employer to sponsor the apprentice</li> <li>Certification in a qualifying trade:         <ul> <li>Boilermaker Certificate of Qualification with Red Seal Endorsement, OR</li> <li>Metal Fabricator (Fitter) Certificate of Qualification</li> </ul> </li> </ul>		
Completion Requirements	The Marine Fitter Endorsement will be awarded and included on the apprentice's original Metal Fabricator (Fitter) Certificate of Qualification upon successful completion of:		
	Requirement Level of Achievement Required		
	Technical Training	Minimum 70% in technical training: • Level 1: 240 hours	
	SkilledTradesBC Standardized Written Exam	<ul> <li>Minimum 70%</li> </ul>	
	Work-Based Training	• 2,460 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 2 years to complete. The technical training requirement is typically met through block-release training (full-time, at school) delivered by an 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>Marine Fitter 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 this program:		
	None		
Cross-Program Credits	Individuals who hold the credentials listed below are entitled to receive partial credit toward the completion requirements of this program		
	<ul> <li>None</li> </ul>		





# **Challenge Pathway**

This graphic provides an overview of the Metal Fabricator (Fitter) challenge pathway.



CREDIT FOR PRIOR LEARNING

Individuals who hold the credentials listed below are considered to have met or partially met the prerequisites for challenging this program

None

	Challenge Program Standards		
Credentials Awarded	Metal Fabricator (Fitter) – Certificate of Qualification with Interprovincial Red Seal endorsement		
SkilledTradesBC	An approved Challenge Application, which includes:		
Registration Prerequisites	<ul> <li>7,200 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 or partially met the prerequisites for challenging this program		
	• None		
<b>Completion Requirements</b>	Certification as a Metal Fabricator (Fitter) is awarded upon successful completion of:		
	Requirement	Level of Achievement Required	
	Interprovincial Red Seal Exam	Minimum 70%	



#### **Challenge Pathway - Marine Fitter Endorsement**

This graphic provides an overview of the Marine Fitter challenge pathway.



#### CREDIT FOR PRIOR LEARNING

Individuals who hold the credential(s) listed below are considered to have met, or partially met, the perquisites for challenging this program:

None

	Challenge Program Standards – Marine Fitter Endorsement		
Credentials Awarded	Marine Fitter Endorsement		
Registration Prerequisites	<ul> <li>s An approved Challenge Application, which includes:</li> <li>3,690 documented hours of directly related experience working in the Shipbuilding and Repair Industry And</li> <li>Certification in a qualifying trade:         <ul> <li>Boilermaker Certificate of Qualification with Red Seal Endorsement</li> </ul> </li> </ul>		
	<ul> <li>Or</li> <li>Metal Fabricator Certificate of Qualification</li> </ul>		
Credit for Prior Learning	Individuals who hold the credentials listed below are considered to have met, or partially met, the prerequisites for challenging this program:		
	Credential	Credit(s) Granted	
	<ul> <li>None</li> </ul>	None	
Completion	A Marine Fitter Endorsement is awarded upon successful completion of:		
	Requirement Level of Achievement Required		
	SkilledTradesBC Standardized Written • Minimum 70%		





Supporting Documents

Metal Fabricator (Fitter) Program Outline (2016) – Defines the full scope of knowledge and skills required to competently perform the occupation in BC. Available from SkilledTradesBC's website.

RS Metal Fabricator (Fitter) National Occupational Analysis (2012) – 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:	January 2006
	October 2009
	May 2016
	March 2017
	September 2017
	November 2017
	March 2018
	June 2021

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