

## **METAL FABRICATOR (FITTER)**

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### **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 ITA 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

### **ITA Registration**

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

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



**INDUSTRY TRAINING PROGRAM PROFILE**  
**ACCREDITED PROGRAM**  
**HARMONIZED PROGRAM**

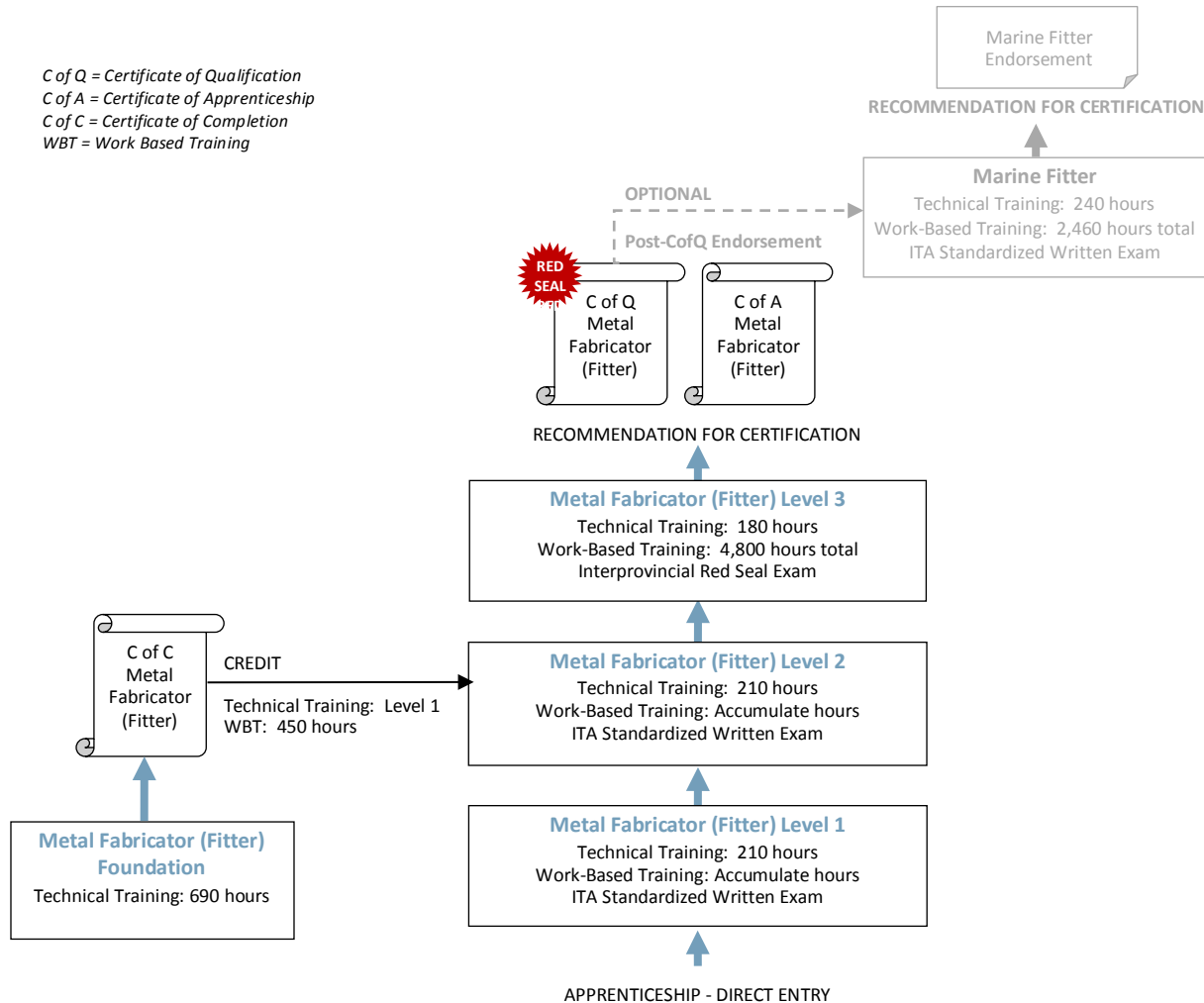


Those who wish to challenge the optional Marine Fitter Endorsement must complete the Marine Fitter Endorsement Challenge Application and submit it to ITA. Challenge applications are assessed for proof of workplace hours and scope of experience prior to acceptance of the individual into the Challenge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

### Apprenticeship Pathway with Optional Endorsement

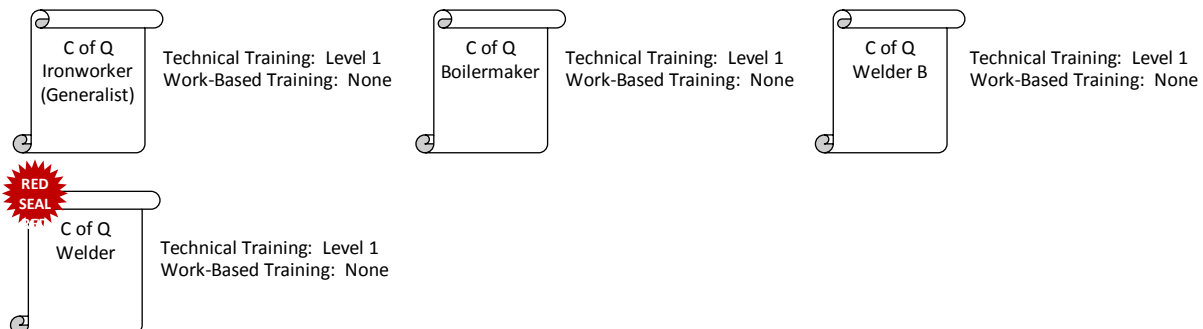
This graphic provides an overview of the Metal Fabricator (Fitter) apprenticeship pathway.

*C of Q = Certificate of Qualification*  
*C of A = Certificate of Apprenticeship*  
*C of C = Certificate of Completion*  
*WBT = Work Based Training*



#### CROSS-PROGRAM CREDITS

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**

- Metal Fabricator (Fitter) – Certificate of Qualification with Interprovincial Red Seal endorsement
- Metal Fabricator (Fitter) – Certificate of Apprenticeship

**Note:** Refer to the Marine Fitter Endorsement Program Standards below to see how this endorsement fits into the apprenticeship pathway for this occupation.

**ITA Registration Prerequisites**

- Agreement signed by the employer to sponsor the apprentice

**Completion Requirements**

Certification as a Metal Fabricator (Fitter) is awarded upon successful completion of:

Requirement	Level of Achievement Required
Technical Training	Minimum 70% in each level of technical training: <ul style="list-style-type: none"> <li>▪ Level 1: 210 hours and ITA standardized written exam</li> <li>▪ Level 2: 210 hours and ITA standardized written exam <i>(when implemented in June 2018)</i></li> <li>▪ Level 3: 180 hours</li> </ul>
Interprovincial Red Seal Exam	<ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul>
Work-Based Training	<ul style="list-style-type: none"> <li>▪ 4,800 hours</li> </ul>
Recommendation for Certification	<ul style="list-style-type: none"> <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 an ITA-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:
- Metal Fabricator (Fitter) – Certificate of Qualification
  - Metal Fabricator (Fitter) – Interprovincial Red Seal endorsement
  - ITA-issued letter authorizing supervision and sign-off of apprentices in this occupation

**Challenging a Level**

- The following levels of technical training can be challenged for advanced placement in this program:
- N/A



### 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 style="list-style-type: none"> <li>▪ Technical Training: Level 1</li> <li>▪ Work-Based Training: None</li> </ul>
Boilermaker – Certification of Qualification	<ul style="list-style-type: none"> <li>▪ Technical Training: Level 1</li> <li>▪ Work-Based Training: None</li> </ul>
Welder B – Certification of Qualification	<ul style="list-style-type: none"> <li>▪ Technical Training: Level 1</li> <li>▪ Work-Based Training: None</li> </ul>
Welder – Certificate of Qualification with Interprovincial Red Seal endorsement	<ul style="list-style-type: none"> <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

<b>Credentials Awarded</b>	Metal Fabricator (Fitter) – Certificate of Completion				
<b>Enrollment Prerequisites</b>	Contact training provider. Prerequisites vary between training institutions				
<b>Completion Requirements</b>	A Certificate of Completion in this program is awarded upon successful completion of: <table style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="width: 50%;">Requirement</th> <th style="width: 50%;">Level of Achievement Required</th> </tr> </thead> <tbody> <tr> <td>Technical Training</td> <td> <ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul> </td> </tr> </tbody> </table>	Requirement	Level of Achievement Required	Technical Training	<ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul>
Requirement	Level of Achievement Required				
Technical Training	<ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul>				
<b>Program Duration</b>	Duration varies depending on how training is delivered, but program generally takes 690 hours to complete				
<b>Credit toward Apprenticeship</b>	<p>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:</p> <ul style="list-style-type: none"> <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.

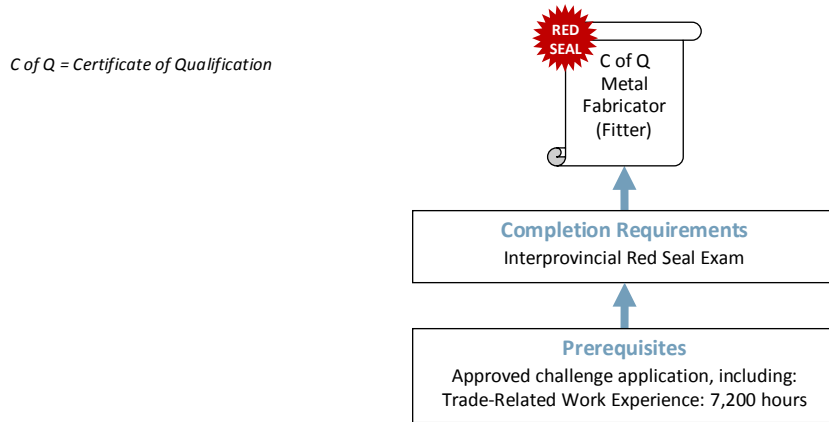
### Marine Fitter Endorsement Program Standards

<b>Credentials Awarded</b>	<ul style="list-style-type: none"> <li>▪ Marine Fitter Endorsement</li> </ul>										
<b>ITA Registration Prerequisites</b>	<ul style="list-style-type: none"> <li>▪ Agreement signed by the employer to sponsor the apprentice</li> <li>▪ Certification in a qualifying trade:               <ul style="list-style-type: none"> <li>○ Boilermaker Certificate of Qualification with Red Seal Endorsement, OR</li> <li>○ Metal Fabricator (Fitter) Certificate of Qualification</li> </ul> </li> </ul>										
<b>Completion Requirements</b>	<p>The Marine Fitter Endorsement will be awarded and included on the apprentice's original Metal Fabricator (Fitter) Certificate of Qualification upon successful completion of:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Requirement</th> <th style="text-align: left;">Level of Achievement Required</th> </tr> </thead> <tbody> <tr> <td>Technical Training</td> <td>           Minimum 70% in technical training:           <ul style="list-style-type: none"> <li>▪ Level 1: 240 hours</li> </ul> </td> </tr> <tr> <td>ITA Standardized Written Exam</td> <td> <ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul> </td> </tr> <tr> <td>Work-Based Training</td> <td> <ul style="list-style-type: none"> <li>▪ 2,460 hours</li> </ul> </td> </tr> <tr> <td>Recommendation for Certification</td> <td> <ul style="list-style-type: none"> <li>▪ Recommendation for certification signed by the Sponsor and an individual holding credentials eligible for sign-off authority</li> </ul> </td> </tr> </tbody> </table>	Requirement	Level of Achievement Required	Technical Training	Minimum 70% in technical training: <ul style="list-style-type: none"> <li>▪ Level 1: 240 hours</li> </ul>	ITA Standardized Written Exam	<ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul>	Work-Based Training	<ul style="list-style-type: none"> <li>▪ 2,460 hours</li> </ul>	Recommendation for Certification	<ul style="list-style-type: none"> <li>▪ Recommendation for certification signed by the Sponsor and an individual holding credentials eligible for sign-off authority</li> </ul>
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Work-Based Training	<ul style="list-style-type: none"> <li>▪ 2,460 hours</li> </ul>										
Recommendation for Certification	<ul style="list-style-type: none"> <li>▪ Recommendation for certification signed by the Sponsor and an individual holding credentials eligible for sign-off authority</li> </ul>										
<b>Program Duration</b>	<p>Duration varies depending on how training is delivered, but the program generally takes 2 years to complete.</p> <p>The technical training requirement is typically met through block-release training (full-time, at school) delivered by an ITA-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.</p>										
<b>Sign-off Authority</b>	<p>Credentials eligible to sign-off on the Recommendation for Certification:</p> <ul style="list-style-type: none"> <li>▪ Marine Fitter Endorsement</li> <li>▪ ITA-issued letter authorizing supervision and sign-off of apprentices in this occupation</li> </ul>										
<b>Challenging a Level</b>	<p>The following levels of technical training can be challenged for advanced placement in this program:</p> <ul style="list-style-type: none"> <li>▪ None</li> </ul>										
<b>Cross-Program Credits</b>	<p>Individuals who hold the credentials listed below are entitled to receive partial credit toward the completion requirements of this program</p> <ul style="list-style-type: none"> <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

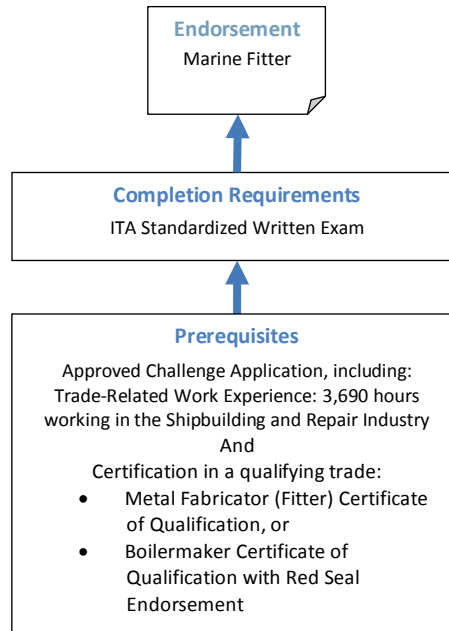
<b>Credentials Awarded</b>	Metal Fabricator (Fitter) – Certificate of Qualification with Interprovincial Red Seal endorsement				
<b>ITA Registration Prerequisites</b>	An approved Challenge Application, which includes: <ul style="list-style-type: none"> <li>7,200 documented hours of directly related experience working in the occupation</li> </ul>				
<b>Credit for Prior Learning</b>	Individuals who hold the credentials listed below are considered to have met or partially met the prerequisites for challenging this program <ul style="list-style-type: none"> <li>None</li> </ul>				
<b>Completion Requirements</b>	Certification as a Metal Fabricator (Fitter) is awarded upon successful completion of: <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Requirement</th> <th style="text-align: left;">Level of Achievement Required</th> </tr> </thead> <tbody> <tr> <td>Interprovincial Red Seal Exam</td> <td> <ul style="list-style-type: none"> <li>Minimum 70%</li> </ul> </td> </tr> </tbody> </table>	Requirement	Level of Achievement Required	Interprovincial Red Seal Exam	<ul style="list-style-type: none"> <li>Minimum 70%</li> </ul>
Requirement	Level of Achievement Required				
Interprovincial Red Seal Exam	<ul style="list-style-type: none"> <li>Minimum 70%</li> </ul>				





## 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 prerequisites for challenging this program:*

None

### Challenge Program Standards – Marine Fitter Endorsement

<b>Credentials Awarded</b>	<ul style="list-style-type: none"> <li>▪ Marine Fitter Endorsement</li> </ul>				
<b>Registration Prerequisites</b>	<p>An approved Challenge Application, which includes:</p> <ul style="list-style-type: none"> <li>▪ 3,690 documented hours of directly related experience working in the Shipbuilding and Repair Industry</li> <li>And</li> <li>▪ Certification in a qualifying trade:               <ul style="list-style-type: none"> <li>○ Boilermaker Certificate of Qualification with Red Seal Endorsement</li> <li>Or</li> <li>○ Metal Fabricator Certificate of Qualification</li> </ul> </li> </ul>				
<b>Credit for Prior Learning</b>	<p>Individuals who hold the credentials listed below are considered to have met, or partially met, the prerequisites for challenging this program:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; border: none;">Credential</th> <th style="text-align: left; border: none;">Credit(s) Granted</th> </tr> </thead> <tbody> <tr> <td style="border: none;"> <ul style="list-style-type: none"> <li>▪ None</li> </ul> </td> <td style="border: none;"> <ul style="list-style-type: none"> <li>▪ None</li> </ul> </td> </tr> </tbody> </table>	Credential	Credit(s) Granted	<ul style="list-style-type: none"> <li>▪ None</li> </ul>	<ul style="list-style-type: none"> <li>▪ None</li> </ul>
Credential	Credit(s) Granted				
<ul style="list-style-type: none"> <li>▪ None</li> </ul>	<ul style="list-style-type: none"> <li>▪ None</li> </ul>				
<b>Completion Requirements</b>	<p>A Marine Fitter Endorsement is awarded upon successful completion of:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; border: none;">Requirement</th> <th style="text-align: left; border: none;">Level of Achievement Required</th> </tr> </thead> <tbody> <tr> <td style="border: none;">ITA Standardized Written Exam</td> <td style="border: none;"> <ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul> </td> </tr> </tbody> </table>	Requirement	Level of Achievement Required	ITA Standardized Written Exam	<ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul>
Requirement	Level of Achievement Required				
ITA Standardized Written Exam	<ul style="list-style-type: none"> <li>▪ Minimum 70%</li> </ul>				



### 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 ITA'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](http://www.red-seal.ca).

### Contacts

The **Industry Training Authority (ITA)** manages B.C.'s industry training and apprenticeship programs. Contact ITA Customer service if you have any questions regarding registration, examinations or certification for this program.

Telephone: 778-328-8700  
Toll Free (within BC): 1-866-660-6011  
Website: [www.itabc.ca](http://www.itabc.ca)

Fax: 778-328-8701  
Email: [customerservice@itabc.ca](mailto:customerservice@itabc.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

Program Profiles are updated regularly. Visit [www.itabc.ca](http://www.itabc.ca) for the most current version.