

METAL FABRICATOR (FITTER) (METAL FABRICATOR)

Credential Issued:

ITA Certificate of Qualification (Metal Fabricator)

Inter-Provincial Red Seal Endorsement (Metal Fabricator (Fitter))

(Persons completing a formal apprenticeship also receive a Certificate of Apprenticeship)

Occupational 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.

Program Duration & Structure:

The program will be delivered in a variety of formats combining in-school and work-based training, all designed to meet the competency standards and profile defined by the industry, and will generally take 4 years to complete. The program includes:

- In-school: 20 weeks* (approximately 5 weeks per level)
- Work-based: 6,400 hours

*The in-school / technical training requirement is typically met through block release training delivered by an ITA approved training provider. It can also be met through approved alternative training models (e.g. distance education, part-time) and / or level challenge exam where these options are available.

Program Completion Requirements:

Completion of 6,400 workplace hours:

- Sponsor attestation

Completion of technical training: (Requirement can be met through challenging a level exam where available.)

- Level 1 - practical assessments and written level examination
- Level 2 - practical assessments and written level examination
- Level 3 - practical assessments and written level examination
- Level 4 - practical assessments and written level examination

Inter-Provincial Red Seal Examination

Program Challenge Requirements:

- 9,600 documented hours of directly related work experience required to challenge Inter-Provincial Red Seal examination.

Program Pre-requisites:

- Recommended Education: Grade 10 or equivalent including English 10, Mathematics 10 and Science 10. Preferred: Grade 12

Assessment Methods:

- In-school assessments (practical and written exams)
- Work-based assessments (practical)
- Final Assessment (Inter-Provincial Red Seal written examination)

Linkages to Other Credentials:

<i>Cross Program Credit</i>
<ul style="list-style-type: none"> ▪ Holders of a BC Certificate of Qualification in Ironworker, Boilermaker and Welder will be eligible to receive technical training credit for Level 1 Metal Fabricator (Fitter).

Prior Learning Assessment:

n/a

Program Standards Documentation:

- National Occupational Analysis (2008) www.red-seal.ca
- Program Outline

Industry Program Standards Mechanism:

Resource Industry Training Organization (RTO) info@rtobc.com

Program Providers:

Institution-based component of the program is delivered by public post-secondary institutions (see www.educationplanner.bc.ca/apprenticeship.cfm for a list of schools), private training institutions, and secondary schools that have been approved by ITA.

Technical Training Content:

Level 1

Introduction to the Trade
 Use Safe Work Practices
 Solve Trade Mathematics Problems
 Use Trade Tools
 Use Shop Equipment
 Burn and Weld Metals
 Read Drawings
 Use Material Handling Equipment
 Use Structural Layout Techniques
 Develop Plate and Structural Patterns
 Use Surface Preparation and Finishing Methods
 Fabricate Plate and Structural Sections

Level 2

Solve Trade Math Problems
 Use Shop Equipment
 Burn and Weld Metals
 Read Drawings
 Use Material Handling Equipment
 Use Structural Layout Techniques
 Develop Plate and Structural Patterns
 Fabricate Plate and Structural Projects

Level 3

Solve Trade Math Problems
 Use Shop Equipment
 Read Drawings
 Use Structural Layout Techniques
 Develop Plate and Structural Patterns
 Fabricate Plate and Structural Sections

Level 4

Solve Trade Math Problems
 Use Trade Tools; Use Shop Equipment
 Read Drawings
 Develop Plate and Structural Patterns
 Fabricate Plate and Structural Sections
 Describe Basic Metallurgy and Testing Techniques
 Use Testing and Inspection Methods
 On-site Installation

IP Examination Competencies: NOA 2008

1. Occupational Skills 21%
2. Job Planning and Preparation 14%
3. Fabrication of Components 42%
4. Assembly of Components 23%

Approved: March 2002 (ITAC)

Updated: January 2006 (ITA)

October 2009 (ITA)