

INDUSTRIAL MECHANIC (MILLWRIGHT)

Credential Issued:

ITA Certificate of Qualification (Millwright)

Inter-Provincial Red Seal Endorsement (Industrial Mechanic (Millwright))

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

Occupational Description:

“Millwright” means a person who dismantles, moves, installs, lays out, sets-up, repairs, commissions, overhauls and maintains all machinery and heavy mechanical equipment, including power transmissions, conveyors, hoists, pumps, compressors, alignment, fluid power and vibration analysis.

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: 28 weeks* (840 hours) (approximately 7 weeks per level)
- Work-based: 6,600 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 6,600 workplace hours:

- Recommendation for Certification signed by the Sponsor and a certified Millwright or holder of an ITA-issued letter authorizing supervision and sign-off of apprentices in the trade.

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

- Level 1 - in-school assessment and ITA standardized examination
- Level 2 - in-school assessment and ITA standardized examination
- Level 3 - in-school assessment and ITA standardized examination
- Level 4 - in-school assessment and ITA standardized examination

Inter-Provincial Red Seal Examination

Program Challenge Requirements:

- 9,900 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)
- ITA Standardized Level Examinations by challenge

INDUSTRIAL MECHANIC (0015)

Program Profiles are updated on a regular basis. Visit our website at www.itabc.ca for the most current version.

Linkages to Other Credentials:

Cross Program Credit

- Holders of a BC Certificate of Qualification in Planermill Maintenance Technician 1 will receive technical training credit for Level 1 Millwright.
- Holders of a military certificate in Marine Engineering Technician, MT #313, and who are QL 5 or higher are eligible to challenge the Machinist Inter-Provincial Red Seal examination.

Prior Learning Assessment:

n/a

Program Standards Documentation:

- National Occupational Analysis (2007) 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

Tools
Trade Science
Work Practices
Cut, Fit and Fabricate
Install Equipment

Level 3

Pumps
Fluid Power
Power Transmissions
Install Equipment
Material Handling Systems

Level 2

Trade Science
Power Transmissions
Cut, Fit and Fabricate
Install Equipment
Lubricants, Seals and Bearings
Fluid Power

Level 4

Prime Movers
Trade Science
Fluid Power
Work Practices
Install Equipment
Compressors
Operational Equipment Effectiveness

IP Examination Competencies: (NOA 2007)

1. Occupational Skills
2. Rigging, Hoisting and Lifting
3. Mechanical Components and Systems
4. Material Handling/Process Systems
5. Fluid Power
6. Preventive & Predictive Maintenance, Testing and Commissioning

Approved: March 2002(ITAC)

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