

HEAVY DUTY EQUIPMENT TECHNICIAN (HEAVY DUTY EQUIPMENT MECHANIC)

Occupation Description

“Heavy Duty Equipment Mechanic” means a person who maintains, manufactures, overhauls, reconditions and repairs equipment powered by internal combustion engines or electricity without limiting the foregoing, including graders, loaders, shovels, tractors, trucks, forklifts, wheeled and tracked vehicles of all types used in construction, logging, sawmill, manufacturing, mining and other similar 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 Heavy Duty Equipment Mechanic by completing the Heavy Duty Equipment Mechanic 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 apprenticeship in high school through either the Secondary School Apprenticeship (SSA) program or the ACE IT program. The SSA program is available for any trade if an employer is willing to sponsor the student. Trades offered through ACE IT vary by region; contact your local school district to find out which technical training programs are being offered through ACE IT 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 and/or Required 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
- Preferred: Grade 12

ITA Registration

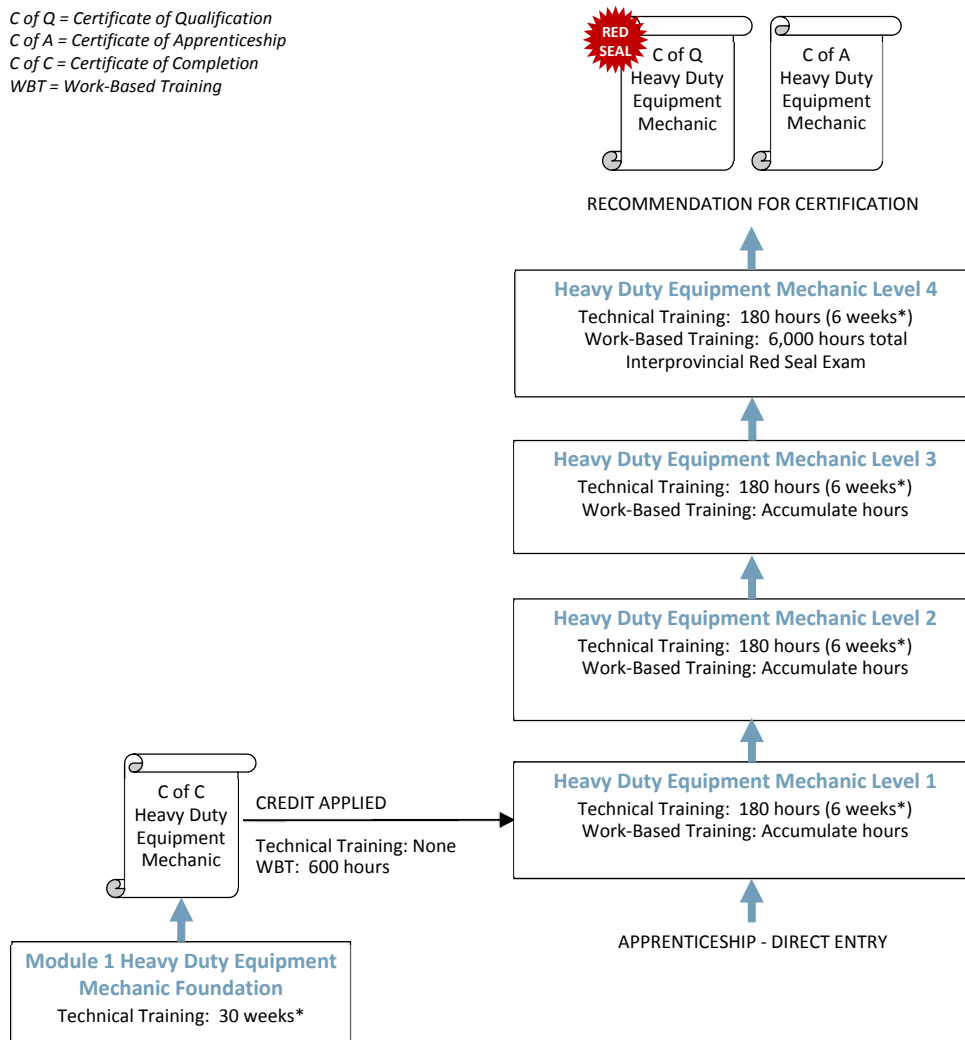
Individuals who wish to begin an apprenticeship in this program must register with ITA along with their sponsor. Application forms for all programs are available from the ITA website. Online registration is also available for most programs through the ITA website.

Those who wish to challenge the Heavy Duty Mechanic certification must complete the Heavy Duty Mechanic 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

This graphic provides an overview of the Heavy Duty Equipment Mechanic apprenticeship pathway.

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



**Suggested duration based on 30-hour week*

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 Standards

Credentials Awarded	<ul style="list-style-type: none"> ▪ Heavy Duty Equipment Technician (Mechanic) - Certificate of Qualification with Interprovincial Red Seal endorsement ▪ Heavy Duty Equipment Technician (Mechanic) - Certificate of Apprenticeship 										
ITA Registration Prerequisites	<ul style="list-style-type: none"> ▪ Agreement signed by the employer to sponsor the apprentice ▪ Completion of Module 1 (pre-employment Foundation Program) or successful challenge of the Module 1 examination ▪ Note: Sponsors may request exemption of apprentices from Module 1 by completing the <i>Heavy Duty Equipment Technician (Heavy Duty Mechanic) Module 1 Exemption Request</i> form. 										
Completion Requirements	<p>Certification as a Heavy Duty Equipment Mechanic is awarded 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 each level of technical training: <ul style="list-style-type: none"> ▪ Level 1: 180 hours (or 6 weeks*) ▪ Level 2: 180 hours (or 6 weeks*) ▪ Level 3: 180 hours (or 6 weeks*) ▪ Level 4: 180 hours (or 6 weeks*) </td> </tr> <tr> <td>Interprovincial Red Seal Exam</td> <td> <ul style="list-style-type: none"> ▪ Minimum 70% </td> </tr> <tr> <td>Work-Based Training</td> <td> <ul style="list-style-type: none"> ▪ 6,000 hours </td> </tr> <tr> <td>Recommendation for Certification</td> <td> <ul style="list-style-type: none"> ▪ Recommendation for certification signed by the Sponsor and an individual holding credentials eligible for sign-off authority </td> </tr> </tbody> </table> <p style="text-align: center;">(*Assuming 30 hours in school per week)</p>	Requirement	Level of Achievement Required	Technical Training	Minimum 70% in each level of technical training: <ul style="list-style-type: none"> ▪ Level 1: 180 hours (or 6 weeks*) ▪ Level 2: 180 hours (or 6 weeks*) ▪ Level 3: 180 hours (or 6 weeks*) ▪ Level 4: 180 hours (or 6 weeks*) 	Interprovincial Red Seal Exam	<ul style="list-style-type: none"> ▪ Minimum 70% 	Work-Based Training	<ul style="list-style-type: none"> ▪ 6,000 hours 	Recommendation for Certification	<ul style="list-style-type: none"> ▪ Recommendation for certification signed by the Sponsor and an individual holding credentials eligible for sign-off authority
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Work-Based Training	<ul style="list-style-type: none"> ▪ 6,000 hours 										
Recommendation for Certification	<ul style="list-style-type: none"> ▪ Recommendation for certification signed by the Sponsor and an individual holding credentials eligible for sign-off authority 										
Program Duration	<p>Duration varies depending on how training is delivered, but the program generally takes 4 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>										
Sign-off Authority	<p>Credentials eligible to sign-off on the Recommendation for Certification:</p> <ul style="list-style-type: none"> ▪ Heavy Duty Equipment Technician – Certificate of Qualification ▪ Heavy Duty Equipment Technician – Interprovincial Red Seal endorsement ▪ ITA-issued letter authorizing supervision and sign-off of apprentices in this occupation 										
Challenging a Level	<p>The following levels of technical training can be challenged for advanced placement in this program</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Level</th> <th style="text-align: left;">Prerequisites</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> ▪ Module 1 ▪ Level 1 </td> <td> <ul style="list-style-type: none"> ▪ None ▪ None </td> </tr> </tbody> </table>	Level	Prerequisites	<ul style="list-style-type: none"> ▪ Module 1 ▪ Level 1 	<ul style="list-style-type: none"> ▪ None ▪ None 						
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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

N/A

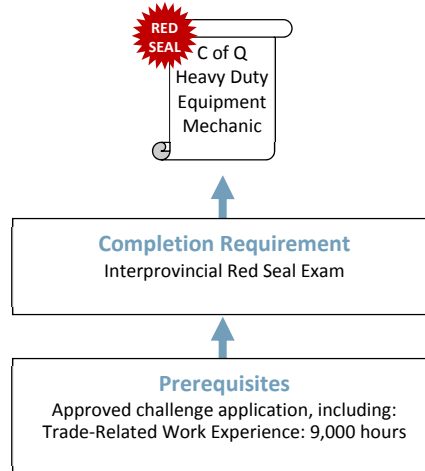
▪ N/A



Challenge Pathway

This graphic provides an overview of the Heavy Duty Equipment Mechanic challenge pathway.

C of Q = Certificate of Qualification



CREDIT FOR PRIOR LEARNING

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

Military certificate in Vehicle Technician (MT #411 QL5 or higher)

Work-Based Training: 9,000 hours

Challenge Program Standards

Credentials Awarded Heavy Duty Equipment Technician (Heavy Duty Equipment Mechanic) – Certificate of Qualification with Interprovincial Red Seal endorsement

ITA Registration Prerequisites An approved Challenge Application, which includes:

- 9,000 documented hours of directly related experience working in the occupation

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
Military certificate in Vehicle Technician (MT #411 QL 5 or higher)	9,000 workplace hours

Completion Requirements Certification as a Heavy Duty Equipment Mechanic is awarded upon successful completion of:

Requirement	Level of Achievement Required
Interprovincial Red Seal Exam	Minimum 70%



Foundation Program

Refer to the Apprenticeship pathway diagram for this program to see how the Heavy Duty Equipment Technician Foundation program leads to apprenticeship in this trade.

Foundation Program Standards

Credentials Awarded	Heavy Duty Equipment Mechanic Foundation – Certificate of Completion				
Enrollment Prerequisites	Contact training provider. Prerequisites vary between training institutions.				
Completion Requirements	A Certificate of Completion in this program is awarded upon successful completion of: <table border="1" 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"> ▪ Minimum 70% </td> </tr> </tbody> </table>	Requirement	Level of Achievement Required	Technical Training	<ul style="list-style-type: none"> ▪ Minimum 70%
Requirement	Level of Achievement Required				
Technical Training	<ul style="list-style-type: none"> ▪ Minimum 70% 				
Program Duration	Duration varies depending on how training is delivered, but program generally takes 30 weeks to complete, assuming 30 hours in school per week.				
Credit toward Apprenticeship	<p>Successful completion of the Module 1 Heavy Duty Equipment Mechanic Foundation program is a prerequisite to the Heavy Duty Equipment Mechanic apprentice program unless an apprentice is exempted at the request of his/her sponsor.</p> <p>Individuals who complete the Module 1 Heavy Duty Equipment Technician Foundation program will receive the following credit toward completion of the Heavy Duty Equipment Technician (Heavy Duty Equipment Mechanic) apprenticeship program:</p> <ul style="list-style-type: none"> ▪ Technical Training: None ▪ Work-Based Training: 600 hours 				



Supporting Documents

Heavy Duty Equipment Technician (Heavy Duty Equipment Mechanic) Program Outline (2011) – Defines the full scope of knowledge and skills required to competently perform the occupation in BC. Available from the ITA website.

Heavy Duty Equipment Technician National Occupational Analysis (2004) – 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

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

Fax: 778-328-8701
Email: customerservice@itabc.ca

Transportation Career Development Association of BC (transCDA) works with industry to identify current and emerging knowledge and skill requirements for occupations related to this program, explore training and certification options, and maintain this program.

Telephone: 604-998-4510
Website: www.tcda.ca

Fax: 604-998-4511
Email: info@tcda.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
Updated: March 2009

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