

DIESEL ENGINE MECHANIC

Occupation Description

“Diesel Engine Mechanic” means a person who installs, repairs, and maintains all internal combustion diesel engines and components used in transport, construction and marine.

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 Diesel Engine Mechanic by completing the Diesel Engine 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 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
- Preferred: Grade 12

ITA Registration

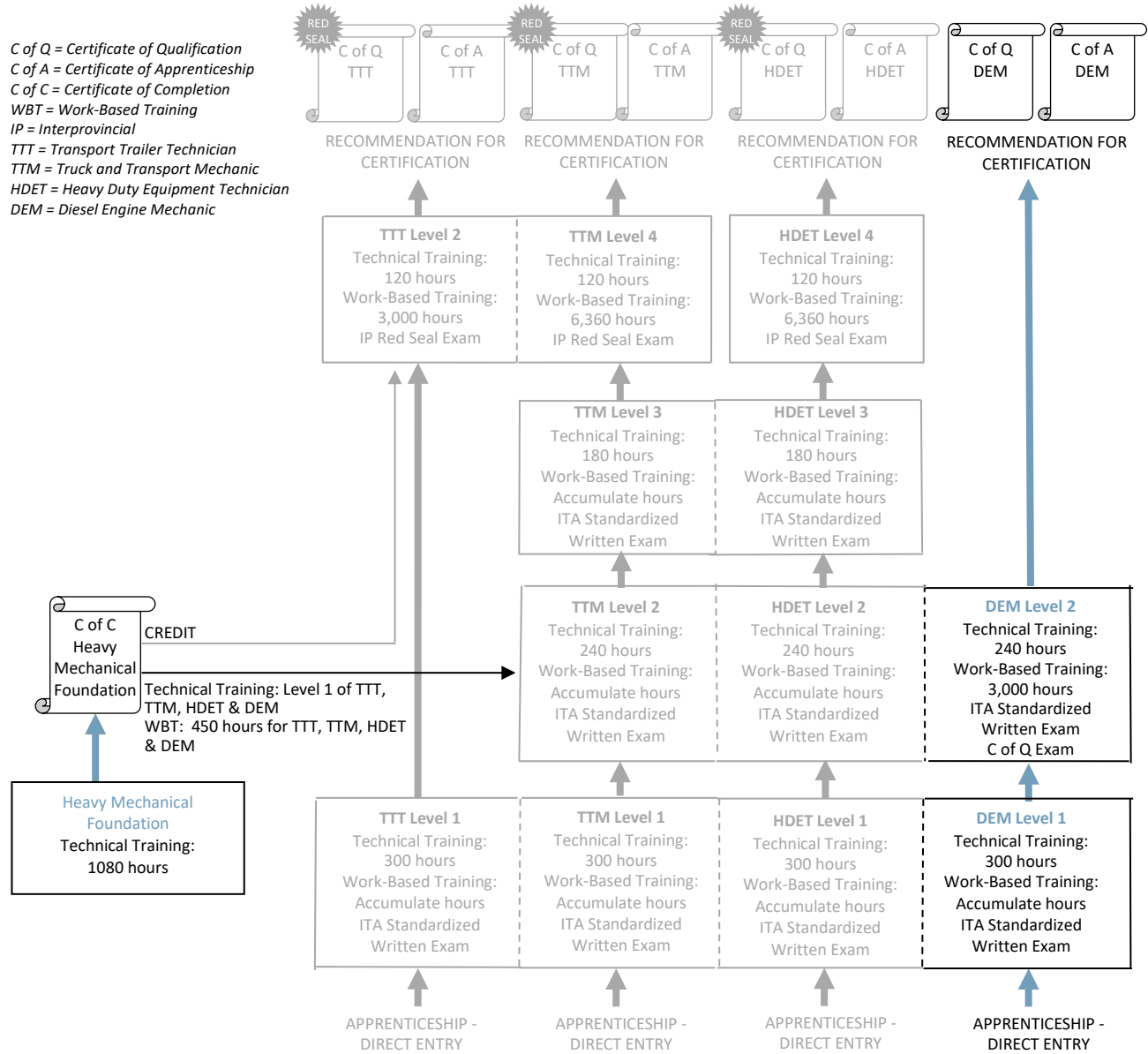
Individuals who wish to begin an apprenticeship in this program must register with ITA along with their sponsor. Application forms for all programs are available from the ITA website. Online registration is also available for most programs through the ITA website.

Those who wish to challenge the Diesel Engine Mechanic certification must complete the Diesel Engine 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 Diesel Engine Mechanic apprenticeship pathway.

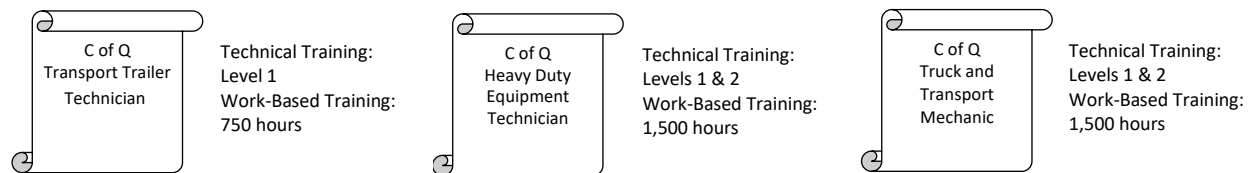
*C of Q = Certificate of Qualification
C of A = Certificate of Apprenticeship
C of C = Certificate of Completion
WBT = Work-Based Training
IP = Interprovincial
TTT = Transport Trailer Technician
TTM = Truck and Transport Mechanic
HDET = Heavy Duty Equipment Technician
DEM = Diesel Engine Mechanic*



= same technical training for multiple trades

CROSS-PROGRAM CREDITS

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





INDUSTRY TRAINING PROGRAM PROFILE
RECOGNIZED PROGRAM

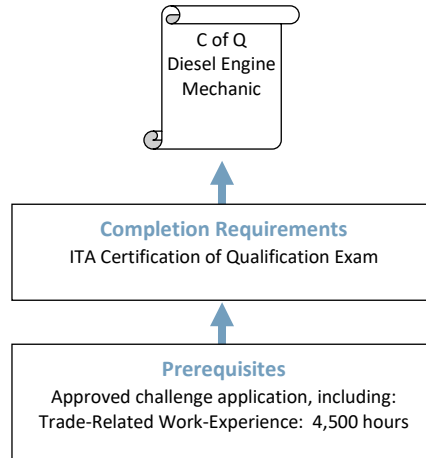
Apprenticeship Program Standards

Credentials Awarded	<ul style="list-style-type: none"> ▪ Diesel Engine Mechanic – Certificate of Qualification ▪ Diesel Engine Mechanic – Certificate of Apprenticeship 										
ITA Registration Prerequisites	<ul style="list-style-type: none"> ▪ Agreement signed by the employer to sponsor the apprentice 										
Completion Requirements	<p>Certification as a Diesel Engine 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: 300 hours and ITA Standardized Written Exam ▪ Level 2: 240 hours and ITA Standardized Written Exam </td> </tr> <tr> <td>ITA Certificate of Qualification 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"> ▪ 3,000 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>	Requirement	Level of Achievement Required	Technical Training	Minimum 70% in each level of technical training: <ul style="list-style-type: none"> ▪ Level 1: 300 hours and ITA Standardized Written Exam ▪ Level 2: 240 hours and ITA Standardized Written Exam 	ITA Certificate of Qualification Exam	<ul style="list-style-type: none"> ▪ Minimum 70% 	Work-Based Training	<ul style="list-style-type: none"> ▪ 3,000 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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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 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>										
Sign-off Authority	<p>Credentials eligible to sign-off on the Recommendation for Certification:</p> <ul style="list-style-type: none"> ▪ Diesel Engine Mechanic – Certificate of Qualification ▪ 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 as a Diesel Engine Mechanic or a Heavy Duty Equipment Technician 										
Challenging a Level	<p>The following levels of technical training can be challenged for advanced placement in this program:</p> <p>Level</p> <ul style="list-style-type: none"> ▪ Level 1 ▪ Level 2 										
Cross-Program Credits	<p>Individuals who hold the credentials listed below are entitled to receive partial credit toward the completion requirements of this program</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Credential</th> <th style="text-align: left;">Credit(s) Granted</th> </tr> </thead> <tbody> <tr> <td>Heavy Duty Equipment Technician – Certificate of Qualification</td> <td> <ul style="list-style-type: none"> ▪ Technical Training: Levels 1 & 2 ▪ Work-Based Training: 1,500 hours </td> </tr> <tr> <td>Truck & Transport Mechanic – Certificate of Qualification</td> <td> <ul style="list-style-type: none"> ▪ Technical Training: Levels 1 & 2 ▪ Work-Based Training: 1,500 hours </td> </tr> <tr> <td>Transport Trailer Technician – Certificate of Qualification</td> <td> <ul style="list-style-type: none"> ▪ Technical Training: Level 1 ▪ Work-Based Training: 750 hours </td> </tr> </tbody> </table>	Credential	Credit(s) Granted	Heavy Duty Equipment Technician – Certificate of Qualification	<ul style="list-style-type: none"> ▪ Technical Training: Levels 1 & 2 ▪ Work-Based Training: 1,500 hours 	Truck & Transport Mechanic – Certificate of Qualification	<ul style="list-style-type: none"> ▪ Technical Training: Levels 1 & 2 ▪ Work-Based Training: 1,500 hours 	Transport Trailer Technician – Certificate of Qualification	<ul style="list-style-type: none"> ▪ Technical Training: Level 1 ▪ Work-Based Training: 750 hours 		
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Challenge Pathway

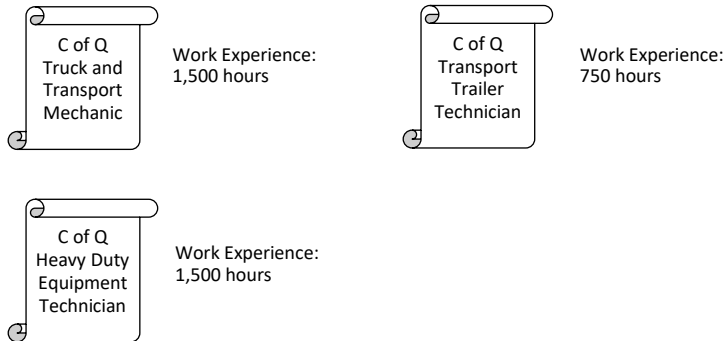
This graphic provides an overview of the Diesel Engine Mechanic challenge pathway.

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





INDUSTRY TRAINING PROGRAM PROFILE RECOGNIZED PROGRAM

Challenge Program Standards

Credentials Awarded	Diesel Engine Mechanic – Certificate of Qualification								
ITA Registration Prerequisites	An approved Challenge Application, which includes: <ul style="list-style-type: none">▪ 4,500 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: <table><thead><tr><th>Credential</th><th>Credit(s) Granted</th></tr></thead><tbody><tr><td>Transport Trailer Technician – Certificate of Qualification</td><td><ul style="list-style-type: none">▪ Work Experience: 750 hours</td></tr><tr><td>Heavy Duty Equipment Technician – Certificate of Qualification</td><td><ul style="list-style-type: none">▪ Work Experience: 1,500 hours</td></tr><tr><td>Truck and Transport Mechanic – Certificate of Qualification</td><td><ul style="list-style-type: none">▪ Work Experience: 1,500 hours</td></tr></tbody></table>	Credential	Credit(s) Granted	Transport Trailer Technician – Certificate of Qualification	<ul style="list-style-type: none">▪ Work Experience: 750 hours	Heavy Duty Equipment Technician – Certificate of Qualification	<ul style="list-style-type: none">▪ Work Experience: 1,500 hours	Truck and Transport Mechanic – Certificate of Qualification	<ul style="list-style-type: none">▪ Work Experience: 1,500 hours
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Completion Requirements	Certification as a Diesel Engine Mechanic is awarded upon successful completion of: <table><thead><tr><th>Requirement</th><th>Level of Achievement Required</th></tr></thead><tbody><tr><td>ITA Certificate of Qualification Exam</td><td><ul style="list-style-type: none">▪ Minimum 70%</td></tr></tbody></table>	Requirement	Level of Achievement Required	ITA Certificate of Qualification Exam	<ul style="list-style-type: none">▪ Minimum 70%				
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INDUSTRY TRAINING PROGRAM PROFILE RECOGNIZED PROGRAM

Foundation Program

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

Foundation Program Standards

Credentials Awarded	Heavy Mechanical – 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><thead><tr><th>Requirement</th><th>Level of Achievement Required</th></tr></thead><tbody><tr><td>Technical Training</td><td>▪ Minimum 70%</td></tr></tbody></table>	Requirement	Level of Achievement Required	Technical Training	▪ Minimum 70%
Requirement	Level of Achievement Required				
Technical Training	▪ Minimum 70%				
Program Duration	Duration varies depending on how training is delivered, but program generally takes 36 weeks to complete, assuming 30 hours in school per week				
Credit toward Apprenticeship	Individuals who complete the Heavy Mechanical Foundation program will receive the following credit toward completion of the Diesel Engine Mechanic apprenticeship program: <ul style="list-style-type: none">▪ Technical Training: Level 1▪ Work-Based Training: 450 hours				



INDUSTRY TRAINING PROGRAM PROFILE RECOGNIZED PROGRAM

Supporting Documents

Diesel Engine Mechanic Program Outline (2013) – Defines the full scope of knowledge and skills required to competently perform the occupation in BC. Available from the ITA website.

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

Revision History

The standards for this program were reviewed and/or updated on the dates below.

Program Standards Approved: March 2002
Updated: January 2006
December 2011
November 2012
August 2013
December 2015
August 2017
October 2021

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