HDT4 – Heavy Duty Equipment Technician Apprenticeship Level 4

Trades

Effective Term & Year: Fall 2022
Program Outline Review Date: 2024-09-01

Program Area: Trades Apprenticeship Training

Description:

This 4-week program delivers the technical training required for Level 4 of the four-level Heavy Duty Equipment Technician Apprenticeship program. Apprentices will develop the knowledge and practical skills related to diagnosing and repairing advanced hydraulic systems, servicing, diagnosing and repairing electric drive systems, diagnosing and repairing wheeled equipment steering, track machine steering, undercarriages, working attachments and pneumatic systems. This program includes classroom theory, demonstrations and practical hands-on training in a heavy-duty mechanic shop setting. Safe work practices related to the heavy-duty equipment trade are reinforced throughout the program.

Credentials Granted:

Level 4 Technical Training credit of the four-level Heavy Duty Equipment Technician Apprenticeship program from SkilledTradesBC

Heavy Duty Equipment Technician Apprenticeship Level 4 certificate from the College of the Rockies

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Delivery Methods: On-Campus (Face-to-Face), Online

Program Duration: 4 weeks

Instructional Activity and Hours:

Activity	Hours
Instructional Hours (hrs/wk)	28 hrs/wk
Directed Studies (hrs/wk)	2 hrs/wk
Total (hrs/wk)	30 hrs/wk
Total Program Hours	120 Hours

Content Weighting:

Activity	Percentage
Theory	50%
Practical Skills	50%

Admission Requirements:

Sponsored Heavy Duty Equipment Technician apprentice who has successfully completed Level 3 Heavy Duty Equipment Technician technical training.

Flexible Assessment:

Credit cannot be awarded for this program through Flexible Assessment.

Program Transfer Credit:

For information about block transfer agreements between programs in British Columbia, Alberta, and elsewhere, please visit http://www.cotr.bc.ca/transfer.

To minimize transfer issues, check with an academic advisor at the institution that will receive the transfer credits.

Textbooks and Required Resources:

Textbook selection varies by instructor and may change from year to year. At the Program Outline Effective Date the following textbooks were in use (most current edition):

HD Tech-Level 4: COTR Custom Package 2017. Queen’s Printer.

Program Competencies and Technical Training Content:

Upon the successful completion of this program, students will be able to:

HDAP 401 Hydraulics

- Diagnose and Repair Advanced Hydraulic Systems

HDAP 402 Electrical

- Service, Diagnose and Repair Electric Drive Systems

HDAP 403 Frames, Steering, and Suspension

- Diagnose and Repair Wheeled Equipment Steering
- Diagnose and Repair Track Machine Steering
- Diagnose and Repair Undercarriage

HDAP 404 Structural Components and Accessories

- Diagnose and Repair Working Attachments
- Diagnose and Repair Pneumatic Systems

Evaluation and Assessment:

HEAVY DUTY EQUIPMENT TECHNICIAN APPRENTICESHIP LEVEL 4

COTR COURSE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
HDAP 401	Hydraulics	55%	55%
HDAP 402	Electrical	10%	10%
HDAP 403	Frames, Steering and Suspension	25%	25%
HDAP 404	Structural Components and Accessories	10%	10%
	Total	**100%**	**100%**
In-school theory/practical subject competency weighting		50%	50%
Final in-school percentage score Apprentices must achieve a minimum 70% as the final in-school percentage score to be eligible to write the Interprovincial Red Seal exam.		**IN-SCHOOL %**	

Pass Requirements:

A minimum percentage score of 70% on the Examination is required for a pass. Final overall

Mark minimum 70%.

Students must provide their own:

- safety glasses
- coveralls – hi-vis
- leather steel-toed boots
- pens, pencils, coloured pencils, paper
- calculator
- Reference Manuals

Academic Policies:

College of the Rockies policies related to courses can be found at https://cotr.bc.ca/about-us/college-policies/ and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.4.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

Program Grade

COM	NCG
Completed to the defined standard – 70% or greater	No Credit Granted – less than 70%

Program Changes:

Information contained in program outlines is correct at the time of publication. Content of the program is revised on an ongoing basis to ensure relevance to changing educational, employment, and marketing needs. The instructor endeavours to provide notice of changes to students as soon as possible. The instructor reserves the right to add material to programs.

Industry Training:

The program competencies and technical training content delivered in this program follow the SkilledTradesBC Program Outline for this trade.

Safety Catalog:

WorkSafeBC regulations apply to all trades programs. Students are expected to follow all safe

work practices and have high regard for the safety of others as well as of themselves. Students are responsible to wear personal protective equipment (PPE) as directed. At a minimum, students must provide and wear approved safety footwear and eyewear at all times in the shop. Additional PPE may be required for specific tasks. Students are expected to wear clothing suitable for working safely in the shop.