## Apprenticeship Manitoba

## Profile Chart: Diesel Engine Mechanic (DEM) - Technical Training

Course A: OCCUPATIONAL	A1 Orientation I: Structure and Scope of Diesel Engine Mechanic Trade Learning		A2 Trade Safety Awareness		A3 Orientation II: The Job of Journeywork		A4 Tools and Equipment		A5 Planning and Communication Skills	
SKILLS										
	Level: 1	Hours: 7	Level: 1	Hours: 7	Level: 3	Hours: 21	Level: 1	Hours: 35	Level: 1	Hours: 7
	A6 Trade Related Mathematics		A7 Access, Hoisting, Lifting, and Rigging Equipment		A8 Computer Applications		Trade Related		A10 Fasteners, Adhesives and other Consumables	
	Level: 1	Hours: 14	Level: 1	Hours: 7	Level: 1	Hours: 7	Level: 1	Hours: 7	Level: 1	Hours: 7
	A11 Standards and Regulations (General and Industry-Specific)		A12 Commissioning and Decommissioning Equipment		A13 Welding		A14 Pre-Provincial Review			
	Level: 1	Hours: 14	Level: 3	Hours: 7	Level: 1	Hours: 42	Level: 3	Hours: 63		
<b>Course B:</b> DIESEL ENGINES AND FUEL/EXHAUST	B1 Fundamentals of Diesel Engines		B2 Diesel Engine Internal Components		B3 Diesel Engine Support Systems		B4 Diesel Engine Fuel and Exhaust Systems			
SYSTEMS	Level: 1	Hours: 28	Level: 1	Hours: 70	Level: 1	Hours: 21	Level: 2	Hours: 63		
Course C: DRIVEN SYSTEMS	C1 Driven Systems		C2 Drivetrains		C3 Diesel Engine Hydraulic & Hydrostatic Drive Systems					
	Level: 2	Hours: 28	Level: 2	Hours: 28	Level: 3	Hours: 35				
Course D: SUSPENSION AND BRAKING SYSTEMS	D1 Braking Systems		D2 Trucks and Suspension Systems		D3 Wheel Assemblies / Traction-Motor		D4 Undercarriage trucks			
	Level: 2	Hours: 28	Level: 2	Hours: 14	Level: 2	Hours: 28	Level: 2	Hours: 21		
Course E: ELECTRICAL AND CONTROL SYSTEMS	E1 Basic Electrical Principles and Testing		E2 Electronic Control Systems		E3 Diesel Engine Starting and Charging Systems		E4 Diesel Engine Accessory Systems		E5 Diesel Engine Power Generator Systems	
	Level: 1	Hours: 42	Level: 3	Hours: 35	Level: 2	Hours: 21	Level: 2	Hours: 14	Level: 3	Hours: 21
Course F: STRUCTURAL/CABIN COMPONENTS AND CLIMATE CONTROL SYSTEMS	F1 Diesel Engine Cab Structures and Interiors, Buildings, and Related Components		F2 Diesel Engine Climate Control Systems							
	Level: 3	Hours: 14	Level: 3	Hours: 14						



Rev. 06/11