

<b>COURSE MODULE</b>			
<b>Course No. CE 48: Special Course on Overhauling of Gear Box</b>			
<b>Duration: 1Week</b>		<b>Effective Days:06</b>	
<b>CM No.</b>	<b>Subjects wise Contents</b>	<b>Periods</b>	<b>Total Periods</b>
<b>48.1</b>	<b>Overhauling of Gear Box:</b>		<b>32</b>
	Introduction - Necessity of Gear Box, Gear ratio, Constituents of a Gear, Types of Gear Boxes.	2	
	Assembly & Disassembly of Main GearBox- Assembly of main shaft, intermediate shaft, clutch shaft, drive shaft, bevel gears, engager body, Lubrication	2	
	Assembly of Drive clutch & Directional Gear Box - Changeover Mechanism, Actuation system, Lubrication.	2	
	Assembly of 6-speed Gear Box - Main shaft, lay shaft, Gears in constant mesh, Shifter fork & shifter rod assembly, Lubrication, Maintenance.	2	
	Distributor Gear Box - Working, parts, Lubrication.	2	
	Axle Gear Box - Working, Assembly of Housing, Assembly of Tail pinion, Bearings, Oil seal, Matching of crown gear & tail pinion, Axle bearing in bearing body, Lubrication, Maintenance.	2	
	Satellite Axle Gear Box - Working, Assembly of Spur gear on axle shaft, pinion, reduction gear box, mounting of motor, braking, Lubrication, Maintenance.	2	
	Z.F. Gear Box - Principle of Torque converter working, Converter clutch, Multi disc clutches, Planetary gear system, Shifter assembly, Solenoids, Different Clutch pressures, Lubrication pressure.	2	
	Z.F. Gear Box - Maintenance Schedule, Working in forward & Reverse drive, Hydraulic circuit.	2	
	Z.F. Gear Box - Electric circuit.	2	
	Z.F.Gear Box-Operating instructions, Troubleshooting	2	
	Funk Gear Box - Working, Parts, Engage feature, Lubrication, Maintenance	2	
	Reduction Gear Box - Working, Gear ratio, Parts, Mounting of Motor, ion, Maintenance.BCM Gear Boxes - Working & Assembly of Turret Gear Box, Main gear box, Screen drum, Lubrication, Maintenance.	2	
	BCM Axle Gear Box / Clutch - Operation during driving & working, Checking of Clutch pressure, Clutch filter , Mounting of Motor, Lubrication, Maintenance.	2	
	Visit to CPOH for demonstration & hands-on training of Z.F. & other Gear boxes Gear box.	4	
<b>48.2</b>	<b>Introduction and Valediction</b>	2	<b>2</b>
	<b>Total</b>	<b>34</b>	<b>34</b>

**Note:** Eligibility: SSE/SE/JE and Technicians.