

<b>COURSE MODULE</b>			
<b>Course No. CE 40: Special Course on Duomatic, WST/VPR</b>			
<b>Duration: 1Week Effective Days:06</b>			
<b>CM No.</b>	<b>Subjects wise Contents</b>	<b>Periods</b>	<b>Total Periods</b>
<b>40.1</b>	<b>Electrical &amp; Electronics:</b>		<b>10</b>
	Engine circuit and Troubleshooting	2	
	Z.F. Circuit and Troubleshooting.	2	
	Power Supply PCBs EK813SV & EK812SV, EK805S, Calibration & Troubleshooting.	1	
	Programmer Unit, Logic Plan, Multi check system.	1	
	Tamping Unit Control Circuit, Depth selector, Transducers, PCBs EK16V & EK176V, Calibration, Testing & Troubleshooting	1	
	Front Input, PCBs & Front Input potentiometers	1	
	Lining Control Circuit, Input Potentiometer, PCBs, Calibration & Troubleshooting.	1	
Leveling & Lifting Control Circuit, Transducers, Input Potentiometers, Calibration & Troubleshooting	1		
<b>40.2</b>	<b>Hydraulics, Pneumatics &amp; Mechanical:</b>		<b>10</b>
	Vane pump, Relief valve, Unloader valve & Troubleshooting	2	
	Spring Centred valve, Spring Offset valve, Check valve, POC Valve, Proportional valve, Servo valve & Troubleshooting.	2	
	Hydraulic Circuits: Constant pressure circuit & Regenerating circuit.	2	
	Air compressor, Safety valve, Water separator, Air Oiler, Air dryer, Working circuit, Brake circuit	2	
	Gear Boxes & related Assemblies - Maintenance aspects & Troubleshooting	2	
<b>40.3</b>	<b>I.C. Engine:</b> Construction, Working Principle & Main Systems. Maintenance Schedule/Steps & Troubleshooting.	2	<b>2</b>
<b>40.4</b>	<b>Track Machines &amp; Working Principles:</b>		<b>6</b>
	Operation & Main Assemblies of DUO & WST.	2	
	Working Principles including Design Mode	2	
	Hands on training on calculating Vm values in 4-point lining and Versine, X and K values for 3 point lining and Levelling using OEM'S manual.	2	
<b>40.5</b>	<b>Computer:</b>		<b>4</b>
	Introduction to ALC Hardware & Win ALC Software, DRP, CMS, CWS	2	
	Hands On training on using ALC measuring run data to computing best curve also making data file for known Track Geometry and Front Offset's	2	
<b>40.6</b>	<b>Introduction &amp; Valediction</b>	2	<b>2</b>
	<b>Total</b>	<b>34</b>	<b>34</b>

**Note: 1. Eligibility: SSE/SE/JE and Technician.**

**2. Practical demonstration in Model rooms shall be given along with theoretical as and when required.**