

<b>COURSE MODULE</b>			
<b>Course No. CE 34: Special Course for JS/SS Officers of Track Machines</b>			
<b>Duration: 1 Week      Effective Days: 6</b>			
<b>CM No.</b>	<b>Subjects Session wise Contents</b>	<b>Periods</b>	<b>Total Periods</b>
<b>34.1</b>	Track Machine Electronics	2	2
<b>34.2</b>	<b>Hydraulics, Pneumatics &amp; Mechanical:</b> Introduction to Hydraulics & Pneumatics, Demonstration of hyd./Pneumatic components, hyd. transparent models in model room.	2	2
<b>34.3</b>	<b>I.C. Engine:</b> Engines used on Track machines. Working Principle of 4 Stroke Diesel Engine (Diesel cycle), Main Systems of I.C. Engine.	2	2
<b>34.4</b>	<b>Track Machines &amp; Working Principles:</b>		<b>16</b>
	Provisions of IRTMM including Infrastructure requirements & manpower Planning for mechanized track maintenance, RDSO TM Reports i.e. Maintenance Schedules, Checklist, and OEM's manual and reports. Trouble shooting reports, Spares Management, Drawing & Specifications of Important Spares, Procurement & Inspection.	2	
	Operation, Main Assemblies & Trouble shooting of Tamping Machines and DTS.	2	
	Operation & Main Assemblies of BCM & SBCM and Troubleshooting	2	
	Operation & Main Assemblies of PQRS, TRT and Russian TRT and Troubleshooting	2	
	Operation & Main Assemblies of T-28, BRM, UTV and RBMV and Troubleshooting	2	
	Working Principles of Lining including Design Mode of working of Tamping Machines	2	
	Working Principles of Leveling including Design Mode of working of Tamping Machines.	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>34.5</b>	<b>Computer:</b>		<b>8</b>
	Introduction to Automatic Guiding Computer (ALC) Hardware & WinALC Software. Working in Geometry, Measuring Run & Design Mode.	2	
	DRP, CMS and CWS	4	
	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>34.6</b>	<b>Visit to CPOH</b>	2	2
<b>34.7</b>	<b>Introduction and Valediction</b>	2	2
	<b>Total</b>	<b>34</b>	<b>34</b>

- Note:**
1. 2 courses of 1 week duration every year for Track Machine JS/SS Officers with distribution of seat @ 1 per Railway Zone.
  2. To bridge the gap between theory and practical, 1 visit to CPOH shall be arranged. Practical demonstration in Model rooms shall be given along with theoretical sessions as and when required besides Practical sessions specifically earmarked for Model Rooms.