

| <p align="center"><b>COURSE MODULE</b></p> <p align="center"><b>Course No. CE 37:Special course on design Lining , Levelling and stabilization</b></p> <p align="center"><b>for SSE/JE (P.Way)</b></p> <p align="center"><b>Duration: 1 week                      Effective Days:6</b></p> |                                                                                                                |                |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------|----------------------|
| <b>CM No.</b>                                                                                                                                                                                                                                                                              | <b>Subjects wise Contents</b>                                                                                  | <b>Periods</b> | <b>Total Periods</b> |
| <b>37.1 Working Principle &amp; stabilization</b>                                                                                                                                                                                                                                          | History of Mechanization, Introduction to Track Machines on IR, their Functions and Output.                    | 2              | <b>20</b>            |
|                                                                                                                                                                                                                                                                                            | Provisions of IRTMM including Infrastructure requirements & manpower planning for mechanized track maintenance | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Rules for movement and Block working including action in case of machine breakdown                             | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Tamping Technology, Working Principles including Design Mode of working i.e 4-Point, 3-Point Lining,           | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Working Principles including Design Mode of Levelling.                                                         | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Pre-tamping During Tamping and Post Tamping activities                                                         | 1              |                      |
|                                                                                                                                                                                                                                                                                            | Working principle of DTS Machines                                                                              | 1              |                      |
|                                                                                                                                                                                                                                                                                            | Proportional levelling system and pressure and frequency adjustment for different working sites                | 1              |                      |
|                                                                                                                                                                                                                                                                                            | Hands on calculating ,Vm correction in 4-point lining                                                          | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Hands on calculating, Versine values in 3-point lining.                                                        | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Hands on calculating, K and X correction in leveling.                                                          | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Laser Lining System.                                                                                           | 1              |                      |
| <b>37.2 Computer</b>                                                                                                                                                                                                                                                                       | Introduction to ALC Hardware &WinA LC Software.                                                                | 1              | <b>6</b>             |
|                                                                                                                                                                                                                                                                                            | Working in Geometry & Measuring Run Mode also making data file for known Track Geometry and Front Offset's.    | 1              |                      |
|                                                                                                                                                                                                                                                                                            | Hands On training on using ALC measuring run data to computing best curve.                                     | 2              |                      |
|                                                                                                                                                                                                                                                                                            | Hands On training on CMS & CWS .                                                                               | 1              |                      |
|                                                                                                                                                                                                                                                                                            | Hands On training on DRP (Data recoding processor)                                                             | 1              |                      |
| <b>37.8</b>                                                                                                                                                                                                                                                                                | <b>Visit to CPOH and Field Visit</b>                                                                           | <b>6</b>       | <b>6</b>             |
| <b>37.8</b>                                                                                                                                                                                                                                                                                | <b>Introduction &amp;Valediction</b>                                                                           | <b>2</b>       | <b>2</b>             |
|                                                                                                                                                                                                                                                                                            | <b>Total</b>                                                                                                   | <b>34</b>      | <b>34</b>            |

**Note: Eligibility: Working SSE/JE(P.Way)**