



Permanent Way Engineer

COURSE AIMS

This course is intended to provide a delegate with a comprehensive understanding required for the Management of the Permanent Way and the role of the Permanent Way Engineer.

LEARNING OBJECTIVES

At the end of this course the delegates will: -

- Have a clear understanding of the role and responsibilities of the Permanent Way Engineer
- Be able to demonstrate an in-depth knowledge of the technical requirements for the accurate Inspection and effective Maintenance of the track, including:
 - Formation and Drainage Problems and their Maintenance
 - Jointed Plain Line
 - Continuous Welded Rail
 - Switch and Crossing Work
 - Track Curvature and Super Elevation
 - Clearances
 - Off-Track Responsibilities
- Be able to complete a structured Inspection of both Plain Line and Switch and Crossings
- Understand the essentials of Managing Track in Extreme Weather Conditions
- Have a clear understanding of the essential requirements for Track Geometry Design for the Maintenance of Clearances
- Have a technical appreciation of the Operation of the Track Recording Coach and be able to interpret the records.
- Be familiar with the essential elements for the Management of Rail Flaws
- Have a clear understanding of the Track Conditions that give rise to the Risk of Derailment and the requirement for Site Investigations
- Be aware of the Principal Requirements for effective prioritising, planning and managing Resources
- Be fully conversant with all relevant Railway Group Standards, Network Rail Company Standards and Contractual Requirements
- Have a clear understanding of Technical Audit Requirements
- Be aware of the relevant on-track plant and their capabilities
- Have a basic understanding of the requirements for effective Management of Finances, Information and Personnel
- Have an understanding of the Infrastructure Signalling System and Circuitry and its Interface with the Maintenance/Renewal of the Permanent Way

COURSE DURATION

Ten days, consisting of two five day modules, Monday to Friday.

PRE-REQUISITES

There are no particular educational or competence pre-requisites for the course. However, the following factors will be of significant benefit to the delegate: -

- Prior experience in working as a Track Manager/Engineer or a Senior Technical Support Position
- In-depth knowledge of the Permanent Way and its components

PERSONAL PROTECTIVE EQUIPMENT

This course requires the delegate to be on or near the running line, therefore, he/she MUST be in possession of: -

- Valid Track Safety Competence
- Protective High Visibility Clothing
- Safety Footwear

The protective equipment must comply with current safety standards.

CERTIFICATION

A Certificate of Attendance will be awarded to the delegate on completion of the course.