



Basic Signalling Technology

Aim

This course is intended for the signal engineer who requires development of signalling principles knowledge towards design of interfaces to trackside equipment.

Key Features

Demonstration of all equipment types on working systems with complete diagrams.

- Signalling Systems
- Points
- Plan conventions and symbols
- Cabling
- Signalling relays and circuits
- Power Supplies
- Electrical interlockings
- Location design
- Train Detection
- The project life-cycle
- Signals
- Works design and testing processes
- Automatic Warning System
- Competence issues
- Train protection and Warning System

Course Outcomes

On successful completion of this course, the delegate will be able to describe and interpret the following:

- Operation of Relay and SSI driven signals.
- Symbols on signalling plans and circuit diagrams.
- Operation of train detection systems.
- Principles of operation of interlockings.
- Principles of TPWS application and operation
- Mechanical and electrical operation of points.
- Principles of Rail Signalling power supplies.
- Selection of Rail Signalling cabling.
- Design and testing processes and relationships.

Assessment and Certification

Achievement of the Course Outcomes will be assessed by a theory assessment.

The delegate's achievement of the Course Outcomes will be confirmed by a certificate which will be forwarded to the nominated client contact following the course.

Pre-Requisites

A well prepared delegate is expected to be able to demonstrate an understanding of basic electrical principles, symbols and circuits.

Practical Information

Duration: 10 Days

Location: at our Derby training centre, or on your premises (subject to equipment avail- ability)

Maximum number of delegates: 10

This course is produced and run by Signet Solutions.

For further information contact us:

enquiries@signet-solutions.com

www.signet-solutions.com

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Course Progressions

We offer many signalling technical courses, and it can be difficult to work out what's best for your needs. The following table will assist you.

*Development Courses in green text

These courses typically form the backbone of a career development path, and are usually taken in the order shown. *Available on an "open" basis, in which you can take individual places from our regular timetable.*

*Supplementary Courses in blue text

These courses provide supplementary knowledge about a specific technology or process. They can generally be taken on an "as needed" basis, without any particular order. *Available on a "private" basis, in which you sponsor the delivery of a full course. This works better for four or more delegates.*

This is just a quick guide – please consult our individual course specifications for more detailed information. Please ask us if you have any queries.

Signal Maintenance & Signal Installation	Signal Design	Signal Works Testing
Introduction to Signalling/ Basic Signalling 1 & 2	Basic Signalling Technology Intermediate Signalling Technology Layouts Intermediate Signalling Technology Control Tables Advanced Signaling Technology	Introduction to Signalling/ Basic 1 & 2 Mod 5 - Test Assistant Mod 3c - Verification Tester Mod 3BL - Functional Tester Mod 4 - Functional Tester Mod 2 - Principles Tester Mod 1 - Tester in Charge
SMTH - Signalling Maintenance Testing Handbook Appreciation Route Relay Interlocking - Maintenance Interlocking Design Clamp Lock Installation Clamp Lock Maintenance Cable Jointing Supplementary Back Drives + Stretcher Bars EISS Electrical Installation Skills Electrical Principles Style 63 Points Installation Style 63 Points Maintenance Westpac MK111A Maintenance + Faulting HW100 Points Maintenance EBI Track 200/T121 Track Circuits Fault Finding Techniques Mechanical Signalling	Route Relay Interlocking Route Relay Interlocking - Maintenance + Faulting Western Region E10k Circuitry Correlation Westpac MK11A - Design Location Design Project Level Crossing Design SSI Appreciation SSI Control Tables SSI Data Appreciation SSI Data Preparation Route Relay Interlocking - Mod 3BI Westpac MK11A - Testing	