



Fault Finding & Circuit Reading

Aim

- Ensure the delegates have the underpinning knowledge to understand and interpret signalling diagrams.
- To provide the delegates with the underpinning knowledge of generic circuits and their applications in signalling controls
- Provide the delegates with the ability to successfully carry out testing and fault finding on generic signalling circuits.

Key Features

- Circuit Design
- Circuit Construction
- Circuit Function
- Principles of control
- Logical Circuit function
- Fundamentals of Testing
- Fundamentals of Fault Finding
- Half Split fault finding
- Fault Scenario Theoretical Assessment
- Fault Scenario Practical Assessment

Course Outcomes

On successful completion of this course, the delegate will be able to:

- Describe the operation and function of generic signalling circuits.
- Use signalling diagrams to logically understand circuit operation
- Establish the similarities between logic gates and relay logic, and the relationship for fault finding.
- Fault find using efficient and methodical methods.

Assessment and Certification

Achievement of the Course Outcomes will be assessed by a practical 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 have a basic background in Signal Engineering. Ideally they will have attended some basic training already (i.e. BS1/BS2/ Introduction to Signalling/Electrical Principles) or have relevant experience.

Practical Information

Duration: 5 Days

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

Maximum number of delegates: 8

This course is produced and run by Signet Solutions.

For further information contact us:

enquiries@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 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 | |