

# BASIC SIGNALLING TECHNOLOGY (INITIAL PATHWAY)

## DESCRIPTION

This course provides the underpinning knowledge to work as a Signalling Designer on the MTM Metropolitan Rail Network and V/Line Regional Rail Networks.

## AUDIENCE

This course is for participants who hold the Signalling Assistant Designer – National role and wish to progress to the role of MTM or V/Line – Signalling Designer. This course will validate the MTM or V/Line – Signalling Designer Job Role and support the participant with the assessment of their Signalling Designer – National Job Role.

## COURSE OBJECTIVES

This course will cover the following objectives:

- Understand the role and responsibilities of a Signal Designer within the limits of their authority
- Identify and use key design documents within the design lifecycle
- Understand the design and testing process and interrelationship/impact on project timescales
- Identify main hazard identification and risk analysis techniques
- Understanding the types and typical uses of relay types and configurations
- Understand the application of the Signalling Power architecture
- Explain the purpose and operation of train detection systems
- Identify the types of signals and indicators
- Explain the principles of enforcement application
- Explain the control and detection of points and movable infrastructure
- Understand the principles of Railway Crossings
- Describe the basic principles of Interlocking operation

## DISCLAIMER

Detailed objectives and performance criteria will be provided on Day 1.

## DURATION

- Four and a half (4.5) Days
- Half (1/2) Day Knowledge Assessment

## DELIVERY MODE

- In Person Classroom Delivery

## ASSESSMENT METHOD

- Knowledge Assessment

## IMPORTANT

Participants must bring their own device to complete the online Knowledge Assessment.

## COURSE PREREQUISITES

- Participant MUST be 18+ years of age
- Participants are required to have met the following pre-requisites to commence:
  - Hold a valid Rail Industry Worker (RIW) card
  - Hold a valid Signalling Assistant Designer – National Job Role
  - Hold a valid MTM or V/Line Signalling Assistant Designer Job Role

## PREREQUISITE VERIFICATION

- Verifications will normally be completed by MTA within two (2) business days
- Participants will not be able to proceed with enrolment until verifications have been confirmed

## COURSE COMPLETION

Participants who successfully complete all requirements of this course will be awarded a Certificate of Completion (CoC). This certificate is accepted on the MTM Metropolitan Rail Network and V/Line Regional Rail Networks (not including ARTC networks).

## RIW CERTIFICATE UPLOADS

Metro Trains Australia (MTA) will upload the participant's certificate to the RIW database and the Training Hub.

Uploads will be completed by MTA, normally within two (2) business days of CoC being issued.

## TRAINING DAY REQUIREMENTS

On the day of training participants are required to bring:

- Valid RIW Card
- The following Personal Protective Equipment (PPE) items:

|                                                                                                                                     |                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <br>Steel capped lace up boots with ankle support | <br>Full length trousers |
| <br>Rail Approved Orange Hi-Vis vest              | <br>Long sleeve shirt    |

### IMPORTANT

Participants cannot commence training without an RIW card and PPE.



## CLASSROOM VENUE

**Rail Academy Newport (RAN)**  
**Shea Street, Newport VIC 3015**

- Vehicle and pedestrian access to the RAN is via Shea Street, off Champion Road.
- Note, pedestrian access is **not** available directly to the RAN from Newport Railway Station, it is up to a 30 min walk to Shea Street.



## INFORMATION & BOOKINGS

<https://training.metrotrainsau.com>