

Introduction to Rail Signalling

Monday 9 October – Friday 10 November 2023



Rail signalling is undoubtedly one of the most important aspects of a railway system so it makes sense to have a fundamental knowledge of the basics.

This course provides an overview of the essential principles of railway signalling systems and operations. Whether you are a graduate looking to build your skills, an engineer involved in signalling projects or someone considering a career change, this course is a fantastic professional development opportunity.

By the end of this course you will know about:

- How to adopt key signalling terminology and use it in your work environment
- Rail signalling principles and the core elements of the signalling system
- The critical role signalling systems play in the context of safe working systems
- The importance of systems integration in the context of lineside and digital signalling systems within a single rail network
- The evolution of signalling including future trends and modern signalling systems
- The complexities of assuring the safe operation of both lineside and digital signalling assets
- The principles of digital signalling design
- Future Railway Mobile Communication Systems (FRMCS) and its role in rail safety related communications and enabling new signalling systems
- How to read a signalling plan
- Understanding maintenance aspects of the signalling system
- Pathways to signalling

What's involved?

- Five weekly 60-90 minute live webinars
- Pre-webinar self-study for approximately 90 minutes each week
- Facilitator led online sessions
- The chance to network with participants

Meet your course presenter

**Jane Copperthwaite FIEAust,
CPEng, RPEQ**

Director, Anutha



Jane is a highly accomplished leader with a strong focus on rail signalling. She has experience working in both the public and private sectors in the UK and Australia. Jane has joined Anutha as the Director. In her previous roles, Jane and her team were working to ensure Cross River Rail's rail technology system integrates into the Queensland Rail operations.

Jane has an Honours Degree in Control Engineering, is a Chartered Professional Engineer, RPEQ, member of the Institution of Railway Signal Engineers and a Fellow of the Institution of Engineers Australia.

Course Learning Modules

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| Module 1 | What is Railway Signalling and why do we need it? |
| Module 2 | Signalling Systems as part of a Safeworking system |
| Module 3 | Design and Integration of signalling systems |
| Module 4 | Whole of Life Management of signalling system |
| Module 5 | Transition to Future Systems |

Registration Fee

ARA members: \$1980 Non-members: \$2750