

About Competency Australia

Competency Australia Pty Limited is committed to the provision of quality training and assessment outcomes to our clients. Competency Australia Pty Limited is a Registered Training Organisation (RTO Code 40647).

For more information, please visit our website <http://CompetencyAustralia.com.au> or email us training@CompetencyAustralia.com.au

Course Tutor – John Aitken

John will help you develop your understanding of communication systems and safety, particularly in the railway environment.

The reason for particular systems (“the why”), and the fundamental principles on which they are based (“the how”) are the essence of John’s approach to training.

Not surprisingly, this approach doesn’t encourage rote learning; it might also require you to use your mind!



This course in Railway Communications was developed in the Rail CRC (Cooperative Research Centre) by industry consultants including members of the IRSE (Institution of Railway Signal Engineers Australasia).

The course tutor, John Aitken, was heavily involved in the development of the course material.

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Railway Communication Systems



Course Objectives:

To facilitate understanding of how communications technologies can be applied effectively and safely in the railway environment.

Who should Enrol?

Anyone who wants to gain a better understanding of railway communications systems. The course is practical in outlook and application.



Pre-Requisites

There are no formal pre-requisites for this training course. The course assumes some communications engineering knowledge but is focused on applications. The course was initially designed for graduate engineers but has been successfully completed by people with a variety of backgrounds.

About the Course

Railway Communication Systems is delivered by distance education, with electronic submission of assignments and live on-line tutorial sessions.

This is a single term course, with ten weeks of study material followed by four weeks for project work. Assessment is based on weekly assignments, participation in tutoring sessions and the project.

The topics include:

- Design for success
- Optical fibre transmission systems
- Copper transmission systems
- Radio communication
- Multiplexing
- Train radio
- Passenger information
- CCTV
- Traction Immunisation
- Electromagnetic Compatibility
- Resilience.



Course Outcomes

As you progress through this course you will develop a better understanding of the technologies and systems used for railway communications. These technologies are put together in a project where you will work to produce a conceptual design for a new railway.

This course focuses on the application of technologies in a safe and effective manner. It provides a structure and opportunity for participants to gain domain and engineering knowledge in the railway environment.