Academy –



# EDSM According to EN50126

**BLENDED LEARNING/ONLINE COURSE** | 6 Self-Paced Modules + 3 Live Interactive Sessions

Mastering EDSM in Rail Safety Projects: EN50126 Insights for Engineers and Managers.



## Academy

#### **Course Overview**

The EDSM According to EN50126 course provides engineers, managers and others involved in Rail safety-related projects with a detailed understanding of the fundamentals of EDSM supported by competency-based structure.

The opening module provides background to EDSM and a brief overview of its application in the railway drawing upon best practice. The following modules introduce a number of EDSM fundamentals and the approach suggested by good practice and standards for putting them into place.

Comprehensive guidance on implementing safe work systems in the railway is provided and all participants will have the opportunity to gain hands-on experience of the main techniques involved.

#### The course content is mapped to:

- Industry standard competencies, skills and evidence requirements relevant to rail safety work
  - Industry regulations
  - Australian and international standards
- Information is interspersed with practical exercises. There is a short multiple-choice examinaton at the end to assess the identified learning outcomes.

## **Recommended Prerequisites**

Participants should have a general understanding of engineering and project management principles and practice.

### **Key Benefits**

- Demonstrate a sound understanding of the principles of EDSM
- Appreciate risk in the context of the railway, design and safety management
- Describe how design and the safety lifecycle interact and influence each other
- Relate current best practice including latest safety standardsEN50126-1/2:2017, EN50129:2018, and EN50716:2023 (Infrastructure & Software for rolling stick), EN50155:2017 (Hardware for Rolling stock), to your own business
- Identify and use relevant standards to aid management of design risk
- Identify hazards, assess risks and understand risk assessment and its approaches
- Discover relevant standards and illustrate how risks in general should be managed
- Describe different approaches to risk acceptance and SFAIRP and learn to apply the current and developing legislative requirements for rail design risk
- Contribute to a safety plan and communicate safety-related information including hazard logs and other safety records
- Understand the need for a risk-based system engineering lifecycle approach to enable built-in safety, value and performance
- Make decisions which optimise system safety and engineering design requirements in a business context
- Explain the concept of the designer as a 'rail safety worker' and its implications
- Use case studies to understand the potential for things to go wrong and develop practical risk management skills
- Understand project management, systems engineering and integration, validation and stakeholder management in the overall rail business context.







## Academy.

### **Who Should Participate**

Any member of staff – decision makers, project managers, line managers, engineers, designers and others - involved with changes to the railway need an understanding of the latest best practice.

EDSM According to EN50126 course provides a structured and robust approach to managing complex railway projects safely that is aligned with the LATEST CENELEC standard EN50126-1/2:2017, EN50129:2018 and EN 50716:2023 and AS4292.2006 for infrastructure, rolling stock, hardware and software.

June – July 2025		
Live Interactive Session:	12 June	17:00 AEST (12 June - 07:00am GMT)
Live Interactive Session:	26 June	17:00 AEST (26 June - 07:00am GMT)
Live Interactive Session:	10 July	17:00 AEST (10 July - 07:00am GMT)

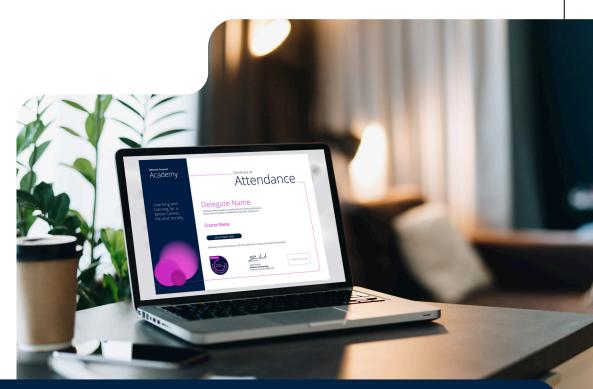
October – November 2025		
Live Interactive Session:	30 October	18:00 AEDT (30 October - 07:00am GMT)
Live Interactive Session:	13 November	18:00 AEDT (13 November - 07:00am GMT)
Live Interactive Session:	27 November	18:00 AEDT (27 November - 07:00am GMT)

## **Course Requirements and Certificates**

Delegates must meet two criteria to be eligible for an Informa Connect Academy Certificate of Completion:

• Satisfactory attendance - Delegates must attend all sessions of the course. Assessments will be ongoing and based on in-class participation and activities.

If delegates have not attended all sessions, the certificate will clearly state the number of hours attended. In-person delegates will receive a printed certificate and virtual delegates will receive a digital certificate.



## Academy\_

#### **Module 1**

- Introduction to EDSM & Acronyms
- Understanding risk
- Examples of engineering and design safety risk in rail
- Intro to EN50126-1/2:2017

#### **Module 2**

• Case studies of accidents related to design: Learning from the mistakes of others

#### **ACTIVE LEARNING**

**Accident case study:** Detailed case study caused by design errors and inadequate **EDSM** 

#### **Module 3**

- Standards for engineering safety
- Software and Electronics hardware and EN50128:2011 and EN50129:2017 and SIL Concepts. EN50155, EN 50716:2023
- Identify, Assessing and Mitigating risk
- Reliability and Maintainability (RAM), Verification and Validation (V&V)

#### **Module 4**

• What does legislation say about rail design/engineering safety risk? Demonstration of SFAIRP and compliance

#### **ACTIVE LEARNING**

**Case study:** A practical application of the concept of SFAIRP

#### **Module 5**

- Safety management systems and quality management
- Safety organisational issues
- Safety acceptance and approval processes
- Security from cyberthreats

#### **Module 6**

- Railway systems engineering and integration
- Sum up and the way forward The new Digital railway
- Course examination









## Informa Connect Academy

## Howard Parkinson

Dr Howard Parkinson is a Chartered Engineer contributing to global standards in railway safety, software and systems engineering. With over 20 years of international experience, he has held senior roles in signalling, rolling stock, infrastructure, and railway systems, including Systems Assurance Manager and Head of Systems Engineering and Safety. His expertise spans metro, tram, and heavy rail, with a focus on safety, compliance, and reliability.

A Fellow of the Institution of Mechanical Engineers (FIMechE) and a member of the Institution of Railway Signal Engineers (MIRSE), Howard holds a doctorate in Mechanical and Aeronautical Engineering from the University of Manchester. Alongside consultancy and research, he delivers specialised training in engineering, safety, risk management, European interoperability, and railway legislation.

"Very knowledgeable with significant and relevant experience. Approachable and gave excellent examples of practical application."

Manager Rollingstock Engineering **Public Transport Services** 

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#### ABOUT INFORMA CONNECT ACADEMY

## Informa Connect

**Informa Connect Academy** is a premier provider of global education and training solutions that caters to a diverse range of professionals, industries, and educational partners. We are dedicated to promoting lifelong learning and are committed to offering learners expert guidance, training, and resources to help them stay competitive in a rapidly changing world.

Our comprehensive range of courses and programmes are tailored to meet the needs of all professionals, from aspiring specialists to seasoned experts. We partner with elite academic organisations and industry leaders with unmatched expertise in their respective fields to deliver an exceptional learning experience.

#### ABOUT TIMINGS, PRICING AND DOCUMENTATION

Course fees include documentation, luncheon and refreshments for in-person learners. Delegates who attend all sessions and successfully complete the assessment, will receive a Informa Certificate and any applicable partner certificates. A hard copy will be provided to in-person learners and a soft-copy will be provided to virtual learners.

#### AVOID VISA DELAYS – BOOK NOW

Delegates requiring visas should contact the hotel they wish to stay at directly, as soon as possible.

To avoid delays, please ensure you apply for your visa several weeks before your intended travel date. Visa processing times can vary.

#### **REGISTRATION, PAYMENTS AND CANCELLATION**

All registrations are subject to our terms and conditions which are available at https://informaconnect.com/delegate-terms-and-conditions. Please read them as they include important information. By submitting your registration, you agree to be bound by the terms and conditions in full. All registrations are subject to acceptance by Informa Connect which will be confirmed to you in writing.

A confirmation letter and invoice will be sent upon receipt of your registration. Please note that full payment must be received prior to the course. Only those delegates whose fees have been paid in full will be admitted to the course.

For full cancellation details, please visit https://informaconnect.com/delegate-terms-andconditions. All cancellations must be sent by email to training@informa.com.au marked for the attention of Customer Services Cancellation. Due to unforeseen circumstances, Informa Connect reserves the right to cancel the course, change the programme, alter the venue, speaker or topics. For full details, please visit www.informaconnect.com/academy.





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If you have any questions about the course or applying, please contact us on:



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