



RAMS Red Belt Training - EN 50126/8/9 and EU Reg. 402/2013 (CSM)

Program

Day 1 - Overview and EN 50126

- The V-Cycle main stages, inputs, outputs and responsible entities.
- RAMS Plan (Content, importance, examples)
- Risk analysis & Risk acceptance principles
- Hazard Log
- Specification of system requirements
- Validation Plan (Content, importance, examples)
- SIL allocation
- Architecture and Apportionment
- The hourglass model
- Common Cause Failures
- FMEA / FTA
- Validation Plan
- Safety Case

Day 2 - EN 50128 and EN 50129

- SW management and organization, roles
- SW V-cycle
- SW Quality Assurance Plan
- SW Requirements Specification, Formal Methods
- SW Architecture & Design
- Use of pre-existing SW
- Integration Test Specification, metrics, traceability
- Overall SW Validation, release note
- Application data & SW Tools
- 50129 Safety Management
- 50129 Safety Case
- Common Cause Failures

Day 3 - EN 50129, EU Reg. 403/2013, Exam

- Effects of multiple faults
- Safety Case structure & dependencies
- Use of pre-existing systems
- Common Safety Methods Introduction
- Safety regulations (EU-level) TSIs, NNTRs
- When does CSM apply?
- Introduction to significant changes
- Versions of the regulation
- Relation with EN512x standards
- Exam

What you get from this training:

- Solid knowledge to implement the applicable safety and RAM norms in their railway domains
- Training material with exercises and examples covering the entire scope of the standard
- Recognized certificate attesting your competencies in the field

Training information

- 3-day course
- Exam (optional on the 3rd day)
- Language: English (other on request)

Target Audience

- Developers, testers or system engineers
- Safety engineers & safety managers
- Quality representatives & project managers



Your trainer

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- Head of Railway and Lead Assessor
- EN 50126, EN 50128, EN 50129 and CSM Expert
- M.Sc. in telecommunication engineering and management
- Member of the Safety and Reliability Society

