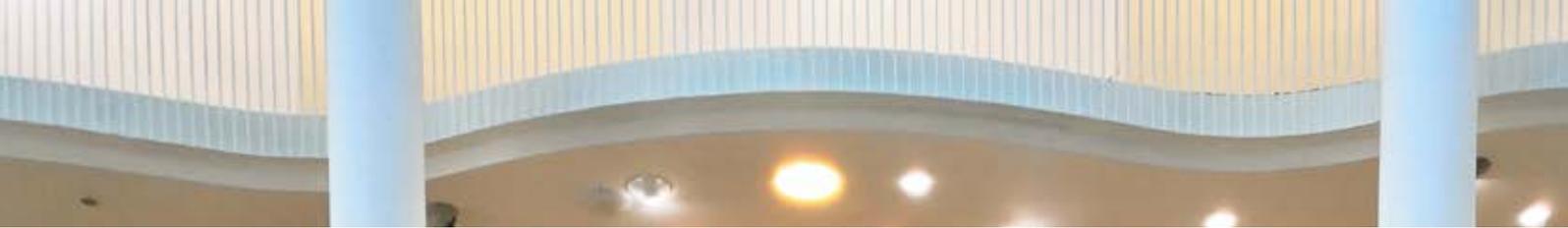


GROWTH AND TRANSFORMATION

A COLLECTION OF PROFESSIONAL DEVELOPMENT COURSES

TRAINING 2026





"An investment in knowledge pays the best interest."
(Benjamin Franklin, *The way to wealth: Ben Franklin on Money and Success*)



Welcome

At APS, we believe that disciplined thinking and continuous learning are essential for long-term professional growth and organisational performance. In increasingly complex and regulated environments, the ability to manage risk, ensure quality and align processes with business objectives has become a decisive success factor.

Our mission is to support individuals and organisations through high-quality, practice-oriented training that drives measurable improvement. Our portfolio covers project and risk management, organisational governance, systems development, safety and compliance frameworks across technical industries.

All programmes are delivered by experienced practitioners who combine deep subject-matter expertise with an engaging and pragmatic teaching style. Through real-world examples, case studies and interactive exercises, we ensure that learning translates directly into everyday professional practice.

We recognise that organisations differ in goals, maturity and operational constraints. APS offers flexible delivery formats, including live online, on-site and blended learning, as well as tailored programmes designed to address specific technical or organisational challenges.

We invite you to explore our training portfolio and discover how APS can support your professional development or strengthen your organisation's capabilities. Whether your objective is to enhance delivery performance, improve governance, reinforce safety practices or build resilience in complex environments, APS is committed to being a trusted partner in your development journey.

Dr. Aura Rosca
APS Advanced Project Services
Managing Director





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Key Takeaways



Our training programmes are designed to strengthen professional capabilities across engineering standards, project delivery and organisational governance. Through practical examples, structured frameworks and real-world insights, participants develop the knowledge and skills required to operate effectively in complex, standards-driven environments.

Upon completion of our courses, you will be able to:



Develop structured problem-solving approaches and adopt effective strategies to address complex technical and organisational challenges.



Gain a solid understanding of the principles, standards and methodologies that underpin modern engineering processes, project delivery and compliance.



Apply knowledge to real-world scenarios and practical exercises, translating theoretical concepts into actionable solutions.



Become familiar with essential tools, methods and frameworks used to plan, execute and manage projects and engineering activities effectively.



Strengthen the ability to anticipate challenges, evaluate risks and develop sound strategies for successful project and organisational outcomes.



Benefit from a collaborative learning environment that encourages the exchange of ideas, experiences and professional best practices.



Enhance analytical and creative thinking skills to navigate complex situations, identify improvement opportunities and contribute to organisational success.



PROJECT MANAGEMENT



PROJECT MANAGEMENT ESSENTIALS



Target audience

Junior project managers, project team members

Prerequisites

None

Language

English

Duration

8 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our PMP-certified instructors. Upon completion of the course, participants receive a certificate of completion and are eligible for 8 contact hours.

Overview

This training provides an introduction to essential project management principles and practices required to deliver projects on time and within budget. Participants gain a practical understanding of governance, planning, estimation and execution control across the project lifecycle. The course emphasises structured planning, effective communication and disciplined monitoring to ensure predictable project outcomes. Through practical exercises and case-based discussion, participants learn how to integrate key project management elements into coherent and controllable project delivery.

Learning Objectives

On completion of this course you will be able to:

- Understand project governance principles and their impact on success
- Develop a project charter
- Create a structured work breakdown structure (WBS)
- Analyse and improve time, cost and effort estimates
- Select effective project communication methods
- Capture and evaluate lessons learned systematically
- Integrate key project management elements for effective planning, execution and control

Training Content

- Project Management Framework: Setting the Foundation
 - Introduction to project management principles, frameworks and governance basics
- Project Initiation: Getting it right from the start
 - Develop a comprehensive project charter
- Project Planning: The Roadmap to Success
 - Create a Work Breakdown Structure
 - Manage scope, time and cost interdependencies
 - Select appropriate communication methods
 - Identify, assess and mitigate risks
- Project execution: Delivering the Work
 - Implement the project plan and manage resources effectively
- Monitoring and Control: Is the plan successful?
 - Tracking progress, analyse performance and optimise time and cost estimates
- Project Closure: The Beginning of the End
 - Gain formal acceptance and capture lessons learned
- Project Integration: Putting it all together
 - Integrate key project management elements for effective planning, execution and control

FUNDAMENTALS OF PROJECT MANAGEMENT OFFICE (PMO)

Overview

As organisations increasingly rely on structured project delivery, the role of the Project Management Office (PMO) becomes critical for coordination, standardisation and performance improvement.

This course examines the strategic purpose, governance structures and capability development of PMOs. Participants learn how to design, implement and evolve a PMO aligned with organisational objectives and maturity goals.

The training focuses on value-driven PMO design, structured improvement roadmaps and long-term organisational performance.

Learning Objectives

Upon completion of this course, participants will be able to:

- Analyse and compare PMO roles and responsibilities across different organisational contexts
- Classify PMO types, assess their benefits and challenges, and determine suitability for specific settings
- Evaluate the alignment between the PMO and organisational strategy
- Develop a structured plan for establishing and operating a PMO to standardise practices and enhance organisational performance
- Assess PMO capabilities and maturity, and define strategies for further development
- Design and implement a continuous improvement plan to maximise PMO performance and organisational value

Training Content

- Core objectives, strategic purpose and organisational value of the PMO
- Types of PMOs, their benefits, challenges and suitability across organisational contexts
- Roles and responsibilities of the PMO in governance, coordination and standardisation
- Aligning the PMO with corporate strategy and assessing its effectiveness
- Designing and implementing a structured roadmap for establishing and operating a PMO
- Assessing PMO capability and maturity levels, and defining development strategies
- Designing and implementing continuous improvement initiatives to maximise PMO performance
- Adapting and evolving the PMO to respond to changing organisational needs



Target audience

Project professionals working with PMOs: project managers, project team members, managers and project leaders who want to learn more about a PMO.

Prerequisites

Experience with project work

Language

English

Duration

3 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our PMP-certified instructors. Upon completion of the course, participants receive a certificate of completion and are eligible for 3 contact hours.

PROJECT RISK MANAGEMENT



Overview

This course provides a structured approach to managing uncertainty throughout the project lifecycle. In dynamic environments, disciplined risk management is essential to protect objectives, control exposure and improve decision quality.

Participants learn how to identify, analyse and prioritise risks, define appropriate response strategies and establish monitoring mechanisms to ensure ongoing visibility and control. The course emphasises systematic risk thinking as a foundation for resilient project delivery.

Learning Objectives

Upon completion of this course, participants will be able to:

- Define risk and explain decision-making under conditions of uncertainty
- Apply core risk management principles to practical project scenarios
- Analyse the components of a project risk management system and assess their effectiveness
- Evaluate risk response strategies, including mitigation, transfer and contractual mechanisms
- Develop a comprehensive project risk management plan incorporating identification, assessment, response and monitoring processes

Training Content

- Fundamentals of risk and decision-making under uncertainty
- Risk tolerance and types of project risks
- Principles and components of a project risk management system
- Risk identification and analysis, including interdependencies
- Risk response strategies: mitigation, transfer and contractual mechanisms
- Insurance and risk-sharing approaches
- Developing a structured project risk management plan
- Monitoring, controlling and adapting risk management strategies

Target audience

Project managers, project team members

Prerequisites

None

Language

English

Duration

3 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our PMP-certified instructors. Upon completion of the course, participants receive a certificate of completion and are eligible for 3 contact hours.

FOUNDATIONS OF STAKEHOLDER MANAGEMENT

Overview

Effective stakeholder management is essential for achieving project objectives in complex organisational environments. Understanding stakeholder interests, influence and expectations enables project leaders to reduce resistance and build sustainable support.

This course provides structured tools and techniques for stakeholder identification, engagement planning and communication strategy. Participants develop practical approaches for managing challenging interactions and strengthening collaborative relationships throughout the project lifecycle.

Learning Objectives

Upon completion of this course, participants will be able to:

- Identify and categorise key project stakeholders
- Analyse stakeholder interests, influence and expectations
- Develop structured stakeholder engagement strategies
- Apply persuasive communication techniques to gain commitment and support
- Manage challenging stakeholder behaviours and situations effectively
- Evaluate and adjust stakeholder management approaches to improve outcomes

Training Content

- Stakeholder Identification and Analysis
 - Stakeholder types and categorisation
 - Identifying key stakeholders and assessing influence, interests and impact
 - Tools and techniques for structured stakeholder analysis
- Stakeholder Communication and Engagement
 - Principles of effective stakeholder communication
 - Building trust and constructive relationships
 - Strategies for stakeholder engagement and active participation
- Managing Challenging Situations
 - Addressing resistance and difficult stakeholder behaviours
 - Selecting appropriate responses to complex interactions
- Monitoring and Improvement
 - Evaluating stakeholder management effectiveness
 - Adjusting engagement strategies based on feedback and evolving project needs



Target audience

Project managers who want to create more alignment and less friction in the achievement of their goals.

Prerequisites

None

Language

English

Duration

3 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our PMP-certified instructors. Upon completion of the course, participants receive a certificate of completion and are eligible for 3 contact hours.



AGILE PROJECT MANAGEMENT



SCRUM ESSENTIALS

Overview

This course introduces the core principles and practices of Scrum as a structured agile framework for managing complex product development. Participants gain a clear understanding of Scrum roles, events, artefacts and metrics, and how they support iterative delivery and continuous improvement.

The training focuses on practical application, timeboxing discipline and collaborative team dynamics. Through case-based exercises, participants learn how to apply Scrum effectively within project and product environments.

Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the principles, values and benefits of the Scrum framework
- Describe Scrum roles, events and artefacts and their purpose within the framework
- Apply the Scrum workflow to practical project scenarios
- Interpret key Scrum rules, including timeboxing and the closed-window principle, and their impact on planning and execution
- Contribute effectively to Scrum-based planning and delivery processes

Training Content

- Scrum principles, values and framework overview
- Scrum roles: Product Owner, Scrum Master and Development Team
- Scrum events: Sprint, Sprint Planning, Daily Scrum, Sprint Review and Retrospective
- Scrum artefacts: Product Backlog, Sprint Backlog and Increment
- User Stories, Story Points, Velocity and Definition of Done
- Visual management tools: task boards and burn-down charts
- Timeboxing and the closed-window principle
- Applying Scrum in practice through exercises and case scenarios



Target audience

Project managers, project and product delivery team members, anyone interested to work with agile teams.

Prerequisites

None

Language

English

Duration

3 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Upon completion of the course, participants receive a certificate of completion and are eligible for 3 contact hours.

AGILE vs. WATERFALL: CHOOSING THE RIGHT APPROACH



Target audience

Project managers, project and product delivery team members.

Prerequisites

None

Language

English

Duration

2 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Upon completion of the course, participants receive a certificate of completion and are eligible for 2 contact hours.

Overview

Selecting the appropriate delivery approach is critical for achieving predictable and sustainable project outcomes. This course provides a structured comparison of Agile and Waterfall methodologies, examining their principles, governance models and suitability across different project contexts.

Participants learn how to evaluate project characteristics, organisational maturity and risk exposure in order to select and justify the most appropriate methodology. The focus is on structured decision-making rather than methodological preference.

Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the core principles and key characteristics of Agile and Waterfall methodologies
- Compare Agile and Waterfall in terms of process structure, governance and team dynamics
- Analyse the advantages and limitations of each approach in different project contexts
- Evaluate project scenarios to determine methodological suitability
- Define structured criteria for selecting the appropriate methodology based on project requirements and constraints
- Justify the choice of Agile or Waterfall using contextual and strategic considerations

Training Content

- Overview of software development and project delivery methodologies
- Agile methodology: principles, structure, roles and typical practices
- Waterfall methodology: lifecycle structure and phase-based delivery
- Advantages and limitations of Agile and Waterfall
- Comparative analysis: governance, flexibility, risk, documentation and stakeholder involvement
- Contextual suitability: project complexity, requirements stability, organisational maturity and team structure
- Case studies illustrating Agile and Waterfall in practice
- Defining selection criteria and adapting the chosen approach to project constraints



AUTOMOTIVE SYSTEMS



AUTOMOTIVE SPICE®: GETTING STARTED



Overview

Automotive SPICE® (ASPICE) defines a structured framework for process capability and continuous improvement in automotive software and systems development.

This training provides a clear and practice-oriented introduction to the ASPICE model, its process structure and capability levels. Participants gain an understanding of how process transparency, traceability and disciplined engineering practices contribute to product quality and organisational maturity.

The course focuses on the intention and structure of Capability Levels 1 and 2, enabling participants to relate ASPICE requirements to their existing development processes and project environments.

Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the purpose, structure and terminology of Automotive SPICE®
- Describe the ASPICE process model and its capability levels
- Interpret the expected outcomes of Capability Levels 1 and 2
- Recognise the role of traceability and consistency in ASPICE
- Relate ASPICE concepts to existing development processes

Training Content

- Introduction to Automotive SPICE® and process maturity models
- Overview of ASPICE process structure and V-Model alignment
- Key ASPICE concepts and terminology
- Capability Levels and Process Attributes
- Base Practices (Capability Level 1) – overview
- Generic Practices (Capability Level 2) – overview
- Traceability and consistency principles
- Introduction to the ASPICE rating model

Target audience

Professionals seeking a foundational understanding of Automotive SPICE®

Prerequisites

None

Language

English

Duration

4 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our Automotive SPICE® certified instructors. Participants receive training materials and a certificate of completion.

AUTOMOTIVE SPICE® FOR ENGINEERS

Overview

This course focuses on the practical implementation of Automotive SPICE® within engineering activities. It provides detailed guidance on how base and generic practices are applied across the V-model lifecycle and how engineering artefacts support capability achievement. Participants develop a structured understanding of process attributes, traceability requirements and work product expectations, enabling them to contribute effectively to ASPICE-compliant projects and assessments.

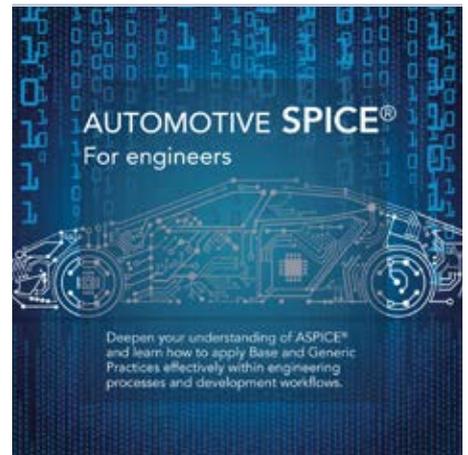
Learning Objectives

Upon completion of this course, participants will be able to:

- Apply ASPICE Base Practices within engineering processes
- Implement Generic Practices to achieve Capability Level 2
- Establish traceability and consistency across the V-Model lifecycle
- Interpret process attributes and expected work products
- Support internal and external ASPICE assessments

Training Content

- Detailed review of ASPICE engineering processes
- Base Practices (Capability Level 1) – practical application
- Generic Practices (Capability Level 2) – implementation guidance
- Traceability across requirements, design, implementation and testing
- Work products and documentation expectations
- Process evaluation and evidence preparation
- Common implementation challenges and practical examples



Target audience

Engineers and project team members involved in Automotive SPICE® compliant development.

Prerequisites

None

Language

English

Duration

8 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our Automotive SPICE® certified instructors. Participants receive training materials and a certificate of completion.

AUTOMOTIVE SPICE® FOR MANAGERS



Target audience

Engineering managers, project leaders and quality managers responsible for Automotive SPICE® implementation

Prerequisites

None

Language

English

Duration

4 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our Automotive SPICE® certified instructors. Participants receive training materials and a certificate of completion.

Overview

This course addresses Automotive SPICE® from a managerial and organisational perspective. It focuses on governance structures, capability improvement strategies and assessment readiness.

Participants gain insight into capability levels, performance indicators and structured improvement planning. The training emphasises strategic alignment of ASPICE objectives with business goals and organisational maturity development.

Learning Objectives

Upon completion of this course, participants will be able to:

- Interpret ASPICE capability levels from a governance perspective
- Define improvement strategies to achieve target capability levels
- Oversee implementation of Base and Generic Practices
- Evaluate organisational readiness for ASPICE assessments
- Align ASPICE process improvement with business objectives

Training Content

- ASPICE framework overview from a management perspective
- Capability Levels and Process Attributes in organisational context
- Governance and process ownership models
- Assessment preparation and rating interpretation
- Improvement planning and capability roadmaps
- Monitoring process performance and maturity progression
- Strategic alignment of ASPICE with organisational goals

FUNCTIONAL SAFETY: AN INTRODUCTION

Overview

Functional Safety is a core requirement in modern automotive development. ISO 26262 establishes a structured, risk-based framework to ensure that electrical and electronic systems achieve an acceptable level of safety throughout the vehicle lifecycle.

This training provides a clear and practice-oriented introduction to automotive functional safety. Participants gain a structured understanding of hazard analysis, ASIL determination and safety lifecycle integration. The course focuses on understanding the intention and logic of the standard rather than clause-by-clause interpretation, enabling participants to integrate functional safety effectively into real development projects.

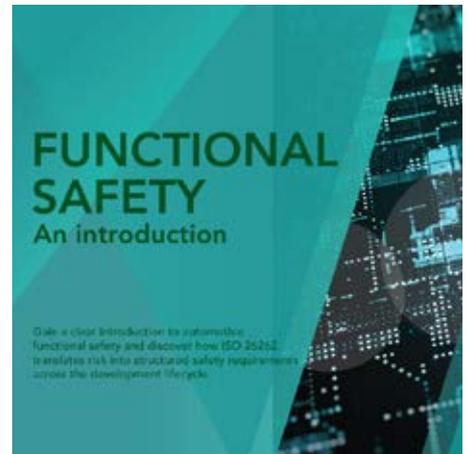
Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the motivation, liability aspects and regulatory context of functional safety
- Describe the structure and safety lifecycle defined by ISO 26262
- Perform a basic Hazard Analysis and Risk Assessment (HARA)
- Determine ASIL levels using severity, exposure and controllability
- Explain the relationship between hazards, safety goals and functional safety requirements
- Understand roles, responsibilities and safety culture within projects

Training Content

- Motivation and legal background of functional safety
- State-of-the-art and product liability considerations
- Overview of ISO 26262 structure and safety lifecycle
- Hazard Analysis and Risk Assessment (HARA)
- ASIL determination – principles and common pitfalls
- Safety goals and Functional Safety Requirements (FSR)
- Introduction to Safety Planning and Safety Case concepts
- Organisational roles and safety culture



Target audience

Engineers and project professionals seeking foundational knowledge of ISO 26262

Prerequisites

None

Language

English

Duration

4 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

FUNCTIONAL SAFETY: A REFRESHER



Target audience

Experienced engineers and safety professionals involved in ISO 26262 implementation and optimisation

Prerequisites

Basic knowledge of FuSa

Language

English

Duration

8 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

Overview

This advanced training revisits Functional Safety from a pragmatic and application-driven perspective. Instead of repeating ISO 26262 theory, the course focuses on efficient implementation, architectural simplification and structured safety argumentation.

Participants critically evaluate existing safety approaches, identify common weaknesses and learn how to balance compliance, development efficiency and engineering practicality.

Special emphasis is placed on safety planning, supplier integration and hardware/software decomposition strategies.

Learning Objectives

Upon completion of this course, participants will be able to:

- Critically evaluate and optimise existing functional safety implementations
- Apply pragmatic tailoring strategies aligned with the intention of ISO 26262
- Develop structured and convincing safety case argumentation
- Design value-driven safety plans integrated into project management
- Apply architectural and ASIL decomposition strategies in hardware and software
- Identify typical weaknesses in safety concepts and documentation
- Balance safety requirements with development efficiency

Training Content

- The intention behind ISO 26262 – beyond clause compliance
- The "6 Questions Rule" for pragmatic safety
- Efficient safety planning and tailoring strategies
- Re-use and in-use argumentation
- Supplier integration and distributed development
- Safety Case structure and argumentation logic
- Completeness of safety analysis and fault mitigation
- Architectural simplification and cross-domain considerations
- ASIL decomposition principles and independence requirements
- Hardware and software decomposition strategies

CYBERSECURITY FOR ROAD VEHICLES

Overview

This course provides a structured introduction to automotive cybersecurity, focusing on regulatory requirements and lifecycle integration. Participants gain an understanding of UNECE R155 and ISO/SAE 21434 and how these frameworks define cybersecurity management expectations across development, production and post-production phases.

The training explores threat analysis and risk assessment (TARA), security concepts and validation principles. Participants develop a practical understanding of how cybersecurity risks are identified, assessed and mitigated within automotive systems.

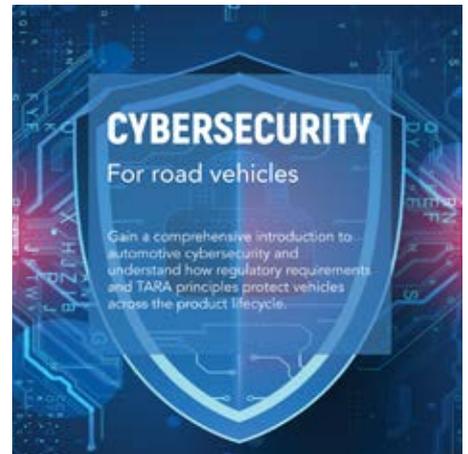
Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the regulatory framework of UNECE R155 and the structure of ISO/SAE 21434
- Identify common cybersecurity threats in automotive systems
- Apply Threat Analysis and Risk Assessment (TARA) principles
- Integrate cybersecurity considerations throughout the product lifecycle
- Interpret validation and verification requirements under ISO/SAE 21434
- Recognise post-production cybersecurity responsibilities, including monitoring and updates

Training Content

- Introduction to automotive cybersecurity and regulatory context
- Overview of UNECE R155 requirements
- Structure and key clauses of ISO/SAE 21434
- Organisational and project-level cybersecurity management
- Threat Analysis and Risk Assessment (TARA)
- Cybersecurity concepts and requirements in product development
- Cybersecurity validation and verification
- Production, operations and maintenance considerations
- End-of-support and decommissioning responsibilities



Target audience

Engineers and project professionals involved in automotive development and cybersecurity activities

Prerequisites

None

Language

English

Duration

8 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

AUTOMOTIVE CYBERSECURITY FOR MANAGERS



Target audience

Managers and decision-makers responsible for cybersecurity governance and regulatory compliance.

Prerequisites

None

Language

English

Duration

4 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

Overview

This course addresses automotive cybersecurity from a managerial and governance perspective. It focuses on regulatory compliance, accountability structures and strategic integration of cybersecurity within the organisation.

Participants gain insight into UNECE R155 and ISO/SAE 21434 requirements, cybersecurity management systems (CSMS) and audit readiness. The training emphasises leadership responsibility, risk governance and lifecycle compliance alignment with business objectives.

Learning Objectives

Upon completion of this course, participants will be able to:

- Interpret UNECE R155 and ISO/SAE 21434 requirements from a governance perspective
- Define roles, responsibilities and accountability structures for cybersecurity management
- Oversee implementation of a Cybersecurity Management System (CSMS)
- Evaluate organisational readiness for regulatory audits and compliance assessments
- Align cybersecurity strategy with product, operational and business objectives
- Monitor cybersecurity performance across the vehicle lifecycle

Training Content

- Regulatory landscape: UNECE R155 and ISO/SAE 21434 overview
- Cybersecurity Management System (CSMS) requirements
- Organisational governance and accountability models
- Project-level cybersecurity oversight
- Risk governance and decision-making
- Compliance monitoring and audit preparation
- Lifecycle responsibilities: development, production, post-production
- Continuous improvement and strategic alignment



RAILWAY ENGINEERING



GETTING STARTED WITH RAMS (EN 50126)



Target audience

Engineers and project professionals involved in railway system development and assurance

Prerequisites

None

Language

English

Duration

6 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

Overview

EN 50126 establishes the RAMS framework (Reliability, Availability, Maintainability and Safety) for railway applications and defines a structured lifecycle approach for managing system performance and risk. This training provides a clear and practice-oriented introduction to RAMS principles within railway projects. Participants gain an understanding of how RAMS activities are integrated into system engineering, project governance and safety assurance from concept through decommissioning. The course focuses on the intention and structure of EN 50126, enabling participants to understand how reliability targets, hazard management and verification activities contribute to a sufficiently safe and operationally robust railway system.

Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the RAMS concept and its relevance for railway systems
- Describe the lifecycle approach defined in EN 50126
- Understand how RAMS requirements are derived and allocated
- Recognise the role of hazard management and risk acceptance criteria
- Identify key RAMS deliverables and their integration into project structures
- Understand how RAMS supports safety argumentation and operational performance

Training Content

- RAMS principles in railway systems
- Structure and lifecycle phases of EN 50126
- System definition and requirement allocation
- Hazard identification and risk management principles
- Reliability and availability modelling basics
- Maintainability and lifecycle support considerations
- Verification, validation and evidence
- Integration of RAMS into project governance and documentation

GETTING STARTED WITH EN 50129

Overview

EN 50129 defines the framework for demonstrating the safety of signalling and safety-related electronic systems in railway applications. It establishes the requirements for achieving and justifying the required Safety Integrity Level (SIL).

This training introduces the principles of safety assurance in the signalling domain, focusing on structured safety case development, safety integrity allocation and evidence-based demonstration of compliance.

Participants gain a clear understanding of how hardware, software and system-level safety activities contribute to a coherent safety argumentation. The course emphasises lifecycle integration and the role of independent assessment in ensuring confidence in signalling system safety.

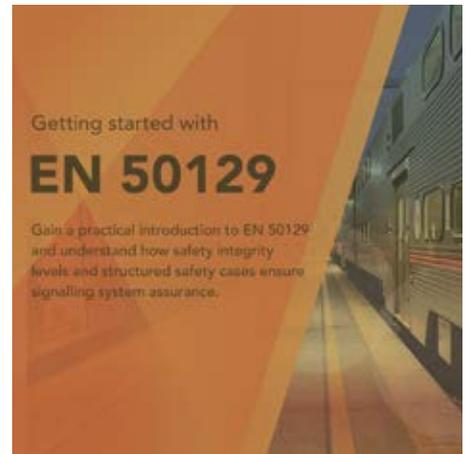
Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the purpose and scope of EN 50129 in railway signalling
- Understand Safety Integrity Levels (SIL) and their application
- Describe the structure and logic of a railway safety case
- Identify required safety evidence and argumentation principles
- Recognise hardware and software safety contributions
- Understand verification, validation and independent assessment roles

Training Content

- Introduction to safety in railway signalling systems
- Scope and structure of EN 50129
- Safety Integrity Levels (SIL) and risk-based allocation
- Safety lifecycle and safety management
- Safety case structure and argumentation
- Safety evidence and demonstration of compliance
- Hardware safety principles
- Interaction with software safety processes
- Independent safety assessment principles



Target audience

Engineers and safety professionals involved in railway signalling projects

Prerequisites

None

Language

English

Duration

6 hours

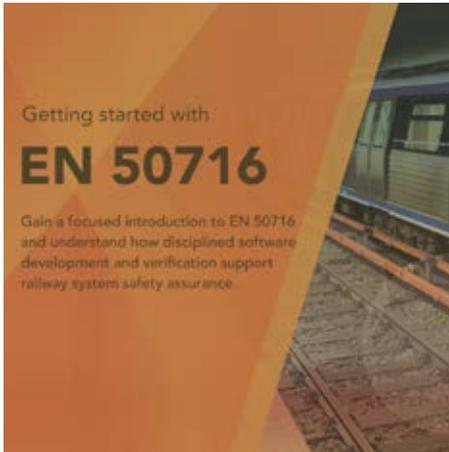
Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

GETTING STARTED WITH EN 50716



Target audience

Software engineers and project professionals involved in on-board railway software development

Prerequisites

None

Language

English

Duration

6 hours

Course material

English

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

Overview

EN 50716 defines requirements for the development and assurance of safety-related software used in on-board railway systems. It complements system-level railway safety standards and establishes structured lifecycle, verification and configuration management principles.

This training provides a focused introduction to software safety in railway applications. Participants gain insight into software lifecycle processes, integrity levels and traceability requirements necessary to support system-level safety assurance.

The course highlights how disciplined software engineering along the standard 50716, structured verification and clear documentation contribute to robust safety argumentation within railway projects.

Learning Objectives

Upon completion of this course, participants will be able to:

- Explain the purpose and scope of EN 50716
- Describe the software lifecycle for safety-related railway systems
- Understand software integrity levels and their implications
- Recognise traceability and configuration management requirements
- Identify verification and validation expectations
- Understand how software evidence supports overall safety assurance

Training Content

- Introduction to railway software safety
- Structure and scope of EN 50716
- Software lifecycle and development processes
- Software integrity levels
- Traceability and configuration management
- Verification and validation principles
- Tool and supporting process considerations
- Interaction with EN 50126 and EN 50129



INFORMATION SECURITY



IT GRUNDSCHUTZ PRAKTIKER



Target audience

IT security offices, IT administrators and professionals responsible for implementing and maintaining IT-Grundschutz within organisations

Prerequisites

None

Language

German

Duration

24 hours

Course material

German

Additional information

This online, instructor-led training is delivered on Microsoft Teams by one of our certified instructors. Participants receive training materials and a certificate of completion.

Beschreibung

Informationssicherheit ist eine wesentliche Voraussetzung für den sicheren und stabilen Betrieb moderner Organisationen. Die Schulung „IT-Grundschutz-Praktiker“ vermittelt eine praxisorientierte Einführung in die Methodik des BSI IT-Grundschutzes und deren Anwendung in der Organisation.

Behandelt werden zentrale Elemente, Vorgehensweisen und das IT-Grundschutz-Kompendium sowie die Grundlagen einer ISO-27001-Zertifizierung auf Basis von IT-Grundschutz. Ergänzend werden Themen wie IT-Grundschutz-Profile, Sicherheitsvorfallmanagement und Business Continuity Management (BCM) behandelt.

Lernziele

Nach Abschluss der Schulung sind die Teilnehmenden in der Lage:

- Die Grundlagen, Struktur und Methodik des BSI IT-Grundschutzes zu erläutern
- Das IT-Grundschutz-Kompendium systematisch für Analyse und Planung einzusetzen
- Einen IT-Grundschutz-Check vorzubereiten und Ergebnisse strukturiert auszuwerten
- Risikoanalysen im Kontext des IT-Grundschutzes einzuordnen
- Die Anforderungen einer ISO-27001-Zertifizierung auf Basis von IT-Grundschutz zu verstehen
- Grundlegende Maßnahmen zur Aufrechterhaltung und kontinuierlichen Verbesserung eines ISMS zu unterstützen

Inhalt

- Einführung in den BSI IT-Grundschutz
- Methodik und Vorgehensweise des IT-Grundschutzes
- Struktur und Anwendung des IT-Grundschutz-Kompendiums
- Durchführung eines IT-Grundschutz-Checks
- Risikoanalyse im IT-Grundschutz
- Umsetzungsplanung und Maßnahmensteuerung
- Aufrechterhaltung und kontinuierliche Verbesserung
- Grundlagen der ISO-27001-Zertifizierung auf Basis von IT-Grundschutz
- IT-Grundschutz-Profile
- Vorbereitung auf Audits
- Sicherheitsvorfallmanagement
- Business Continuity Management (BCM) im Kontext des IT-Grundschutzes

IT GRUNDSCHUTZ BERATER

Beschreibung

Die Schulung „IT-Grundschutz-Berater“ vermittelt eine strukturierte und praxisnahe Vertiefung der BSI IT-Grundschutz-Methodik mit besonderem Fokus auf Beratung, Planung und Begleitung von Umsetzungsprojekten.

Teilnehmende erwerben ein fundiertes Verständnis der Vorgehensweise, des IT-Grundschutz-Kompodiums sowie der Vorbereitung und Durchführung von IT-Grundschutz-Checks. Darüber hinaus werden die Grundlagen der ISO-27001-Zertifizierung auf Basis von IT-Grundschutz, Auditvorbereitung sowie angrenzende Themen wie BCM und Sicherheitsvorfallmanagement behandelt.

Lernziele

Nach Abschluss der Schulung sind die Teilnehmenden in der Lage:

- Die IT-Grundschutz-Methodik strukturiert zu erläutern und beratend anzuwenden
- Das IT-Grundschutz-Kompodium für Analyse, Planung und Maßnahmensteuerung einzusetzen
- IT-Grundschutz-Checks vorzubereiten und Ergebnisse fachlich zu bewerten
- Organisationen bei der Vorbereitung einer ISO-27001-Zertifizierung auf Basis von IT-Grundschutz zu unterstützen
- Umsetzungs- und Verbesserungsmaßnahmen konzeptionell zu begleiten

Inhalt

- IT-Grundschutz-Methodik und Vorgehensmodell
- Anwendung des IT-Grundschutz-Kompodiums
- Durchführung und Bewertung eines IT-Grundschutz-Checks
- Risikoanalyse und Umsetzungsplanung
- Aufrechterhaltung und kontinuierliche Verbesserung
- ISO-27001-Zertifizierung auf Basis von IT-Grundschutz
- IT-Grundschutz-Profile und Auditvorbereitung
- Sicherheitsvorfallmanagement und BCM-Prozess



Target audience

Security consultants, ISMS managers and professionals responsible for advising and supporting organisations in IT-Grundschutz

Prerequisites

None

Language

German

Duration

16 hours

Course material

German

Additional information

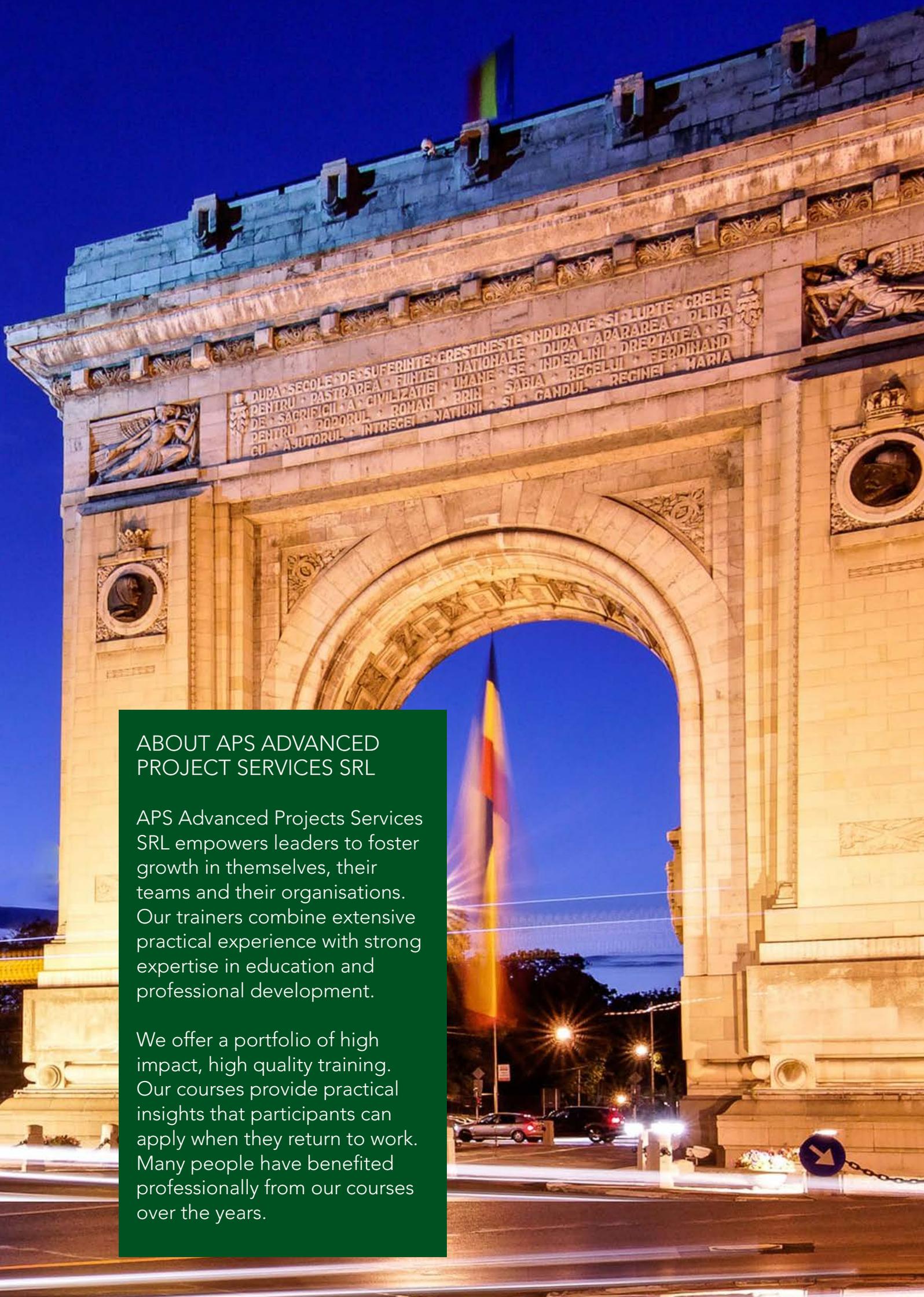
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Certificate

Upon successful completion of the course, APS Advanced Project Services SRL will issue a certificate of completion to students who pass an assessment of a quiz covering the material from the entire course. All courses are graded on a pass/fail basis and students must score 80% to pass and receive the certificate of completion.



Your certificate will be issued and sent to the email address provided during registration. Please note that the certificate image is for illustrative purposes only and may be subject to change at the discretion of APS Advanced Project Services SRL.



ABOUT APS ADVANCED PROJECT SERVICES SRL

APS Advanced Projects Services SRL empowers leaders to foster growth in themselves, their teams and their organisations. Our trainers combine extensive practical experience with strong expertise in education and professional development.

We offer a portfolio of high impact, high quality training. Our courses provide practical insights that participants can apply when they return to work. Many people have benefited professionally from our courses over the years.



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