



Requirements Engineering

“Mastering a key discipline for successful complex projects”

Key benefits of this training course

This training course enables participants to gain a comprehensive understanding of the Requirements Engineering process, from needs analysis through to solution validation.

Learning objectives

This training course enables participants to understand and effectively implement Requirements Engineering as a collective capability that supports business performance and competitiveness. By the end of the course, participants will be able to:

- Understand what a requirement is and its role within a project.
- Define requirements by capturing, eliciting, clarifying, analysing and prioritising them.
- Understand and apply the general rules for writing high-quality requirements and requirement sets.
- Characterise requirements according to their criticality, flexibility and maturity.
- Structure and allocate requirements through architectural design activities.
- Prepare for and facilitate requirements reviews.
- Manage requirements configuration and control the impact of requirement changes throughout the project lifecycle.
- Verify and validate requirements.

Teaching approaches

The course combines theoretical input (40%) with practical exercises (60%) based on a case study representative of a complex development project delivered for a customer operating in an evolving and uncertain environment.

The course can be adapted to meet specific customer requirements.

Target audience

This training course is intended for anyone involved in defining, analysing, managing or using requirements during the design and development phases, whether to produce a specification or to prepare Integration, Verification and Validation (IVV) activities. Typical participant profiles include Project Managers, Systems Engineers, System Architects, Design Engineers, Technical Experts.

A sound understanding of Systems Engineering fundamentals is required.

Completion of the “Systems Engineering Fundamentals” training course is strongly recommended.

In-house training

Duration: 2 days

Presential or remote learning
Customisation available

Language: French or English

Prerequisite : none

Recommendations: Participants should have a good understanding of Systems Engineering fundamentals and are recommended to have completed the “Systems Engineering Fundamentals” training course.

Access timeframe: 2 weeks

Implementation timelines:

Based on the analysis of the client’s needs

Evaluation:

Self-assessment of prior knowledge at the start of the training program
Self-Assessment form upon completion of Training

Methods used for the workshop:

In full-group and sub-groups, role-playing based on a central case study

8 to 12 participants

Disability access:

Yes – please contact us to discuss possible arrangements

Prices: please contact us



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Programme

Positioning Requirements Engineering within a Systems Engineering (SE) Approach

- Overview of Systems Engineering fundamentals
- Definition of a requirement and Requirements Engineering
- Relationships between Requirements Engineering and core Systems Engineering principles

Understanding the Context and Identifying Needs

- Defining stakeholder needs
- Stakeholder identification and analysis
- Considering the full system lifecycle
- Prioritising and categorising needs, including associated operational scenarios
- Anticipating Integration, Verification and Validation (IVV) activities

Translating Needs into Requirements

- Analysing and translating stakeholder needs into requirements
- Applying the rules, characteristics and attributes of well-written requirements

Developing System Requirements and Supporting Architecture Activities

- Analysing and refining stakeholder requirements into system requirements
- Prioritising system requirements

Prioritising and Classifying Requirements

- Stakeholder characterisation and analysis
- Key and critical requirements
- Requirement flexibility
- Functional prioritisation and its impact on requirements

Defining and Allocating Requirements

- Developing the solution through internal functional analysis
- Decomposing and allocating system requirements into technical requirements, in conjunction with architecture activities
- Maintaining end-to-end traceability
- Optimising requirement allocation

Preparing and Conducting Reviews

- Conducting requirements reviews
- Assessing requirement maturity throughout the different project reviews

Managing Requirements

- Impact assessment process
- Strategies for implementing requirement changes
- Configuration Management and Requirements Management
- Configuration control throughout all development phases
- Overview of risks and opportunities management



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Key Figures

More than **20,000 participants** worldwide over nearly **20 years**.

For **90%** of participants (*), the training pedagogical progress is perfectly matching their needs.

97% of participants (*) highlight our trainers' ability to bring knowledge to life, drawing on their real-world professional experiences.

Our training programs meet the objectives (**) for **93%** of the participants (*)

(*) January 2025 – December 2025 period

(**) usefulness of the content for progress and overall satisfaction with the training course