Training – Requirements Engineering (Ref IS101)

Requirements Engineering is a key process for the success of a project. Studies have shown that 40% of the chances of success or failure of a project are related to the Requirements.
The identification of needs and constraints (regulation, ...), their translation into quantifiable, measurable system requirements, their declination through the design up to the definition / execution of the associated verifications, are key elements of control of developments. and justification of compliance with the regulations.
Project management by requirements is another key component of Requirements Engineering for anticipating and monitoring the smooth running of the project.
The management and definition of the requirements is one of the first steps to implement as part of a process improvement process of the company (CMMI).
At the end of this training, you will have acquired the necessary knowledge to understand the implementation of the Requirements Engineering within a project or a company.
Practical exercises are implemented throughout the training.

Duration:

2 days

Goal :

- Understand issues related to requirements
- Understand the requirements in a Systems Engineering approach
- To apprehend the main general or sectoral references related to the Engineering of
- Complex systems: ISO15288, EIA-632, CMMI, GAMP 5
- Acquire a pragmatic methodology for the implementation of the Engineering activities of
- Requirements: quality of a requirement, a set of requirements, prioritization, traceability,
- allocation, configuration management requirements, requirements change management
- Understand the content of deliverables resulting from engineering activities
- Understand the project management indicators by the requirements
- Understand the strengths and weaknesses of the main market tools: DOORS (IBM), Reqtify (Dassault Systèmes) and Quality Center (HP)

Concerned public :

- Managers
- Project managers
- Architects
- Analysts
- Designers

Content:

- Why do Requirements Engineering
  - Industrial issues
  - Industrial Feedback
- The main international standards
  - ISO15288
  - EIA632
  - CMMI
  - GAMP5
- The Requirements Engineering Process
  - The needs collection activities
  - Requirements analysis activities
  - Decomposition and allocation requirement activities
  - Verification / validation activities associated with the requirements
  - Change management activities
- Deliverables
  - The specifications
  - The technical specification
  - The design file
  - The integration / validation plan
  - The justification file
  - The interface specification
  - The integration / validation file
  - The data model
- Requirements Engineering in a project
  - The organization of Engineering
  - Arbitrations
  - The magazines
  - Indicators
- The market's leading tools
  - DOORS (IBM)
  - Reqtify (Dassault Systèmes)
  - QualityCenter (HPE)

Educational, technical and coaching resources implemented

Participatory pedagogy alternating the presentation of formal presentations illustrated with a documentary support with interactive exchanges and discussions around case studies and tutorials.