Course : UML 2: Modeling with Enterprise Architect

Practical course - 3d - 21h00 - Ref. EAR
Price : 1940 CHF E.T.

4,4 / 5

Teaching objectives

At the end of the training, the participant will be able to:

- Know how to use UML in the various software engineering activities (business, requirements, design)
- Know how to implement UML with the Enterprise Architect tool (class, sequence and state diagrams, etc.)
- Know how to develop a quality design by using architecture patterns (layers, MVC)
- Know how to express the design with Enterprise Architect using static and dynamic modeling

Practical details

Hands-on work

Implementation of a complete case study, creation of models, configuration of Enterprise Architect and use of integrated tools.

Course schedule

1 Introduction to business modeling

- The project approach and software engineering activities. Importance of the design activity.
- UML within the project approach. The different diagrams. The notion of stereotypes and profiles.
- Business modeling: Business processes - activity diagram and domain class diagram.

Hands-on work

Handling of the Enterprise Architect case study: Structuring the project into packages and use of profiles. Business modeling with the activity diagram.

PARTICIPANTS

PREREQUISITES

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

2 Specifying the requirements

- Functional and non-functional requirements. FURPS approach.
- Defining the actors.
- Defining the use cases. Use case diagram.
- Illustration of use case scenarios with the sequence diagram.

Hands-on work
Specification of the requirements of the case study: Use case and sequence diagrams.

3 Designing the system - Static modeling

- Code architecture. Layered patterns/layers. MVC patterns. Structuring in packages.
- Identification of classes. Attributes. Operations. Class diagram.
- Association relationships between classes.
- Generalization relationships.

Hands-on work
Performing static modeling with Enterprise Architect: Structuring the code into packages. Creating the class diagram.

4 Designing the system - Dynamic modeling

- Defining the operations.
- Design-level use case scenarios. Description of the interactions with the sequence diagram.
- Status management. Statechart diagram.

Hands-on work
Performing dynamic modeling with Enterprise Architect: Sequence diagram. Defining states with the state machine diagram.

5 System Design - Deployment Modeling

- Defining deployable components and their interfaces.
- Component diagram.
- Deploying components on the hardware architecture.
- Deployment diagram.

Hands-on work
Modelling the deployment: Component and deployment diagram.

6 Introduction to the advanced functions of the tool

- Code-generating and reverse engineering.
- Generating the documentation.
- Carrying out large projects and collaborative use.

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES
Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

Dates and locations

REMOTE CLASS
2026 : 9 Mar., 27 May, 5 Oct., 2 Dec.