

OO37

1 day

There are enhanced (and longer) versions of this course available.

Please contact us to discuss your needs

Overview of OO Analysis, UML and Design

This course provides a solid grounding in the techniques and application of Object Oriented Analysis and Design. Attendees will learn how the use of the UML and techniques such as RUP can bring real improvements to the quality and efficiency of the design process. Topics covered include OO overview, Requirements Management and the conversion of Requirements into UML diagrams and documents which directly control the building of successful software product. The course focuses on the Business Benefits of the UML approach and discusses real-life issues of the introduction of this technology into teams.

Techniques will be demonstrated by the use of tools such as Enterprise Architect, Eclipse and Visual Use Case.. The course content can be presented within a PRINCE2 environment if required

Course Objectives

- Provide an overview of OO technology
- Explain OO terminology and how it is applied
- Show how OO design simply translates into programming structure
- Show how Business Process is adapted into Use Cases
- Present Use Cases as the starting point for Analysis.
- Demonstrate the end-to-end design capabilities of the UML
- Show how design tools like Enterprise Architect can help the Designer
- Explain Design Patterns, Frameworks and Reuse
- Demonstrate the use of a simple Design Pattern
- Explain the testing aspects of OO systems

Audience

- Management wanting to familiarize themselves with current OO technology.
- Technicians starting to look at OO capabilities
- Senior staff needing a fast introduction to business opportunities of OO design
- Staff from traditional design areas needing to address OO technology

Prerequisites

- Knowledge of some general software design techniques

Timetable

Register at 09:00 for 09:30 start.
Finish at 17:00.

Presentation Style

Lectures, demonstrations and group discussions.

Dates and Venues

Refer to *Course Schedules*.

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Overview of OO Analysis, UML and Design

The course covers:

📁 The UML

📁 OO within your lifecycle, including RUP, Agile, such as XP, DSDM and SCRUM

📁 Where OO starts.. the Business process and Use Cases

📁 OO Tools, Techniques and Modelling, including Eclipse, Enterprise Architect and Visual Use Case / TopTeam

📁 Introduction to Decision Tables for Business Rules

📁 Object Libraries

📁 What are Patterns and Frameworks

📁 *OO Terminology and What it Means!*

- 📁 Classes, Objects
- 📁 Messaging
- 📁 Use Cases
- 📁 Actors, Methods
- 📁 Associations
- 📁 Aggregations
- 📁 Inheritance
- 📁 Interaction,
- 📁 State diagrams

📁 Where Classes come from and Class Diagramming

📁 Testing in the OO environment

- 📁 OO aids in testing
- 📁 Issues in OO testing
- 📁 Scenarios in ATs

📁 Robust Designs and Robustness Analysis

📁 Scenarios and Acceptance tests

📁 Java Class examples

📁 Modelling Static and Dynamic system features

📁 Deployment Diagrams

📁 When do you stop?

📁 Demonstration program and Case Study walk-through