

## Summary

Duration: 2 days

This course demonstrates how the Unified Modelling Language (UML) can be used to uncover, analyse and document software requirements. Business Process Models, Use Case Diagrams, Domain Models and Statecharts are all produced as part of an extensive hands-on and realistic case study.

## Objectives

By the end of the course attendees will:

- Be familiar with the use of the UML language for discovering and describing the requirements for a software system
- Be familiar with one of the major UML CASE Tools
- Be able to create and understand all of the major UML Analysis Diagrams

## Detailed Course Description

### Introducing UML

- Models vs Diagrams
- Class Diagram
- State Chart
- Interaction Diagram
- Use Case Diagram
- Deployment Diagram
- Activity Diagram
- Stereotypes

### Business Modelling

- Beginning the Analysis
- Business Model
- Business Processes
- Using the UML to model processes
- UML Stereotypes
- Eriksson-Penker extensions
- Business Process Overviews
- Business Actors
- Business Workers
- Case Workers
- Process Activity Diagram

### Use Cases

- Use Cases as structured requirements
- Granularity of Use Cases
- Actors
- Discovering Use Cases from Business Processes
- Primary and Secondary Actors
- Ranking Use Cases
- Specifying Use Cases
- Use Case Descriptions
- Non functional requirements
- Preconditions
- Postconditions
- Main Flow
- Extension Flows
- Style Guidelines

### The Domain Model

- Domain Modelling
- Finding Classes
- Notation in the UML
- Attributes
- Associations
- Multiplicities
- CRUD Matrices

### The State Model

- Capturing Business Rules
- Events and States
- Basic Notation
- Superstates and Substates
- Conditional Transitions
- Actions
- Finding Use Cases from the State Model