



UML Training Courses from CRaG Systems

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Business Analysis and System Requirements Definition using UML and Use Cases - Training Course - 3 Days

This UML training course teaches the use of the Unified Modelling Language v2.1 for business analysis and use cases for detailed system requirements definition within the context of a [model-driven software development process](#). Industry best practice is taught for business process modelling, conceptual data modelling, business role modelling and system use case modelling at every appropriate level of abstraction. The strict approach ensures that the results satisfy the needs of both technical and non-technical stakeholders. The resulting models are traceable from individual elements of the business process through to each primitive system function. The techniques are taught to the level required for competence on a real project. Understanding is tested and improved with exercises based on a real-world project example and [using a suitable case tool](#).

Delegates will learn:

- The basics and the necessary detail of the Unified Modelling Language for business modelling
- How to model a business process at multiple levels of abstraction using a hierarchy of UML activity diagrams (flow charts)
- How to structure a business process model using activity diagrams, business use case diagrams and packages for multi-user access and change management
- How to model business concepts and facts using classes and their relationships on class diagrams
- How to model business worker roles together with line and operational relationships using classes, packages and their relationships
- How to integrate business modelling techniques into a conventional approach to project documentation
- How to map a business model into a system requirements model using actors, use cases and classes such that each element is traceable from one model to the other
- How to create a first cut overview of functional requirements with actors and use cases on a use case diagram
- How to write an effective use case description in a way that satisfies both non-technical and technical stakeholders
- How to specify the flow of events as a basic flow and alternate flows
- How to restructure the use case diagram to handle complex relationships between use cases without bloating the use case model
- How to integrate the use case model with non-functional requirements, data requirements, business rules and screen prototyping
- How a use case driven approach to requirements gathering improves estimation, project planning, test development and traceability

Suitable for:

Business Analysts, Business Consultants, Business Process Engineers, System Analysts and Project Managers with at least 2 years experience. This course is not suitable for those seeking certification as a step towards a qualification. See [UML Certification](#) for a detailed discussion.

Course Logistics:

Course attendance is limited to 12 students. Courses start at 9.30am on the first day, 9.00am on subsequent days and finish at 5.00pm each day. Students use a computer for the exercises. For a discussion on case tool use please see [Case Tool Use on Courses](#). Printed course manuals for each student with copies of all presentations, exercises and solutions are provided.

On-Site (In-House) Courses:

The client is expected to provide an appropriate venue, refreshments, SVGA/XGA projector and screen, whiteboard or flipchart and at least one computer per two students loaded with a UML case tool. For a full discussion of on-site course issues please see [On-Site Course Logistics](#).

Scheduled Public Courses:

This course is available as scheduled public training at our London Training Centre. Students bring their own laptops for use on the course. Please see the [Public UML Training Courses in London](#) page for details.

Pricing:

On-site (in-house) course pricing is available from the [On-Site Course Price Calculator](#) page. Public course pricing is available on the [Scheduled Public Courses](#) page. Consultancy pricing is available on the [Consultancy](#) page.

Training Course Outline

Day 1	Day 2
Introduction	<i>Modelling Process Structure Workshop</i>
Logistics - People - Course Structure - Unified Modelling Language - Business Modelling - System Modelling	Modelling Business Structure
Modelling Process Flow	The Conceptual Data Model - Business Entities - Relationships - Business Workers - Responsibilities - Organisation Structure
Writing a Textual Description - Activity Diagrams - Activities and Control Flows - Conditions - Selection and Iteration - Swimlanes - Hierarchy and Concurrency - Modelling Primitive Process Steps	<i>Business Structure Workshop</i>
<i>Modelling Process Flow Workshop</i>	Mapping into System Requirements
Modelling Process Structure	Business versus System Use Cases - Mapping Actors - Mapping Activities and Swimlanes - Mapping Business Workers - Mapping the Conceptual Data Model
Modelling Hi-level and Group Processes - Modelling Process Structure with Packages - Business Use Cases and Business Actors - Business Use Case Diagrams - The Business Modelling Process	<i>Mapping Workshop</i>

Day 3

Specifying Functional Requirements with Use Cases

System Use Cases and Actors - Primitive Use Cases and the Basic Flow - Writing Effective Use Case Descriptions - Writing Sub-flows and Alternate Flows - 'Include' and 'Extend' Relationships - Modelling Browser-Based Applications

System Use Case Workshop

Requirements Gathering

Collecting Requirements Information - Mapping from the Business Model - Proof of Concept Prototypes - Requirements Documents - Estimating and Traceability - Incremental Development - Gaining Agreement

Requirements Gathering Workshop

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