



# UML Training Courses from CRaG Systems

sales@cragssystems.co.uk +44 (0)845 003 9358



## UML For Test Development Training Course - 2 Days

This UML training course is aimed at system and sub-system test developers who want understand how to create test scripts from UML based system documentation. The course provides an in-depth technical study of system models based on the Unified Modelling Language (UML) v2.1. The techniques learned are applicable to the testing of systems using conventional client-server architectures, those to be deployed as web applications, and real-time or embedded systems. Each technique is taught to the level required for competence on a real project and understanding is tested and improved with exercises. Students spend a significant part of the training course applying the techniques to a real-world project example.

### Delegates will learn:

- The basics and the necessary detail of the Unified Modelling Language
- The basics and necessary detail of Object Orientation
- How to develop a test strategy for user acceptance, system level, component level, integration and regression testing
- To understand a use case diagram and use case description
- How to develop a system level test script from a use case
- To understand a detailed model of the system's data using classes and their relationships
- How to develop scripts to test the systems stored data
- To understand a sequence diagram which details the functionality of a use case
- How to add detail to a test script from a sequence diagram
- To understand statecharts and the way in which they define the dynamics of a system
- How to develop scripts that test the state dependent behaviour of the system

### Suitable for:

System Analysts, Test Developers, Test Managers and System Developers with at least 2 years experience.

### 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 currently not available as scheduled public training. Please see the [Scheduled Public Courses](#) page for available courses.

### 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

<p><b>Day 1</b></p> <p><b>Introduction</b></p> <p>People - Course Structure - Unified Modelling Language - Overview of Test Strategies - Using UML For System Test Development - Using UML for Component Test Development</p> <p><b>Developing System Test Scripts From Use Cases</b></p> <p>System Use Cases and Actors - Primary Use Cases and the Basic Course - Reading Use Case Descriptions - Sub-flows and Alternate Flows - 'Include' and 'Extend' Relationships - Script Structure - Example Scripts</p> <p><i>Basic System Testing Workshop</i></p> <p><b>Data Model Testing From Class Diagrams</b></p> <p>What is an Object? - Classes and Objects - Attributes - Operations and Methods - Associations and Links - Navigability and Naming - Multiplicity and Other Adornments - Association Classes - Aggregation and Composition - Strategies for Testing - Example Scripts</p>	<p><b>Day 2</b></p> <p><i>Stored Data Testing Workshop</i></p> <p><b>Interaction Model Testing From Sequence Diagrams</b></p> <p>Interactions, Messages, Operations and Methods - Sequence Diagrams - Selection and Iteration - Activation - Collaboration Diagrams - Strategies for Testing - Example Scripts</p> <p><i>Interaction Model Testing Workshop</i></p> <p><b>State Model Testing From Statecharts</b></p> <p>The Meaning of the State Model - States and Transitions - Events and Conditions - Actions and Activities - Consistency with Other Diagrams - Strategies for Testing - Example Scripts</p> <p><i>State Model Testing Workshop</i></p>
--	--

CRaG Systems (UK) [sales@cragssystems.co.uk](mailto:sales@cragssystems.co.uk) +44 (0)845 003 9358

UML For Test Development Training Course