



UML and BPMN Training Courses

Tassc trainers are expert practitioners in UML with over 10 years experience in object technology. They will guide you through the theory and share real project experiences with you. All training courses have a high practical content with exercises relating to each of the key concepts taught. Theory is regularly updated to reflect the latest UML and BPMN notations.

Tassc provides a flexible approach to UML and BPMN training:

- simply select one of our popular predefined course outlines below, or
- 'mix and match' from our catalogue of modules to build your own custom course

UML Essentials

2 Days - £2,700 + VAT + expenses *



Useful for anyone who needs an introduction to object technology and UML.

- UML 00 Introduction
- UML 01 UML Overview
- UML 02 Use Case Diagrams (with exercises)
- UML 03 Advanced Use Cases (with exercises)
- UML 04 Activity Diagrams (with exercises)
- UML 05 Object Principles (with exercises)
- UML 06 Domain Models (with exercises)

Requirements Modelling with Use Cases

1 Day - £1,350 + VAT + expenses *



Designed for requirements engineers and business analysts who wish to learn how best to capture and document requirements using use cases.

- UML 00 Introduction
- ALM 02 Requirements Management (with exercises)
- ALM 03 Requirements Elicitation
- UML 02 Use Case Diagrams (with exercises)
- UML 03 Advanced Use Cases (with exercises)

Business Process Modelling with BPMN

¾ Day - £1,000 + VAT + expenses *



Aimed at business analysts who need to understand and document business processes.

- UML 00 Introduction
- ALM 01 BPMN Diagrams (with exercises)
- UML W1 BPMN Workshop

Requirements Analysis with BPMN and Use Cases

2 Days - £2,700 + VAT + expenses *



Designed for business analysts who need to understand and document business processes and devise a set of requirements as a use case model.

- UML 00 Introduction
- ALM 01 BPMN Diagrams (with exercises)
- ALM 02 Requirements Management (with exercises)
- ALM 03 Requirements Elicitation
- UML 02 Use Case Diagrams (with exercises)
- UML 03 Advanced Use Cases (with exercises)
- UML W2 Requirements Workshop

UML and BPMN for Business Analysts

3 Days - £4,050 + VAT + expenses *



Designed for business and systems analysts tasked with defining and documenting system requirements. Gain a good overall exposure to the main concepts and notation. Learn how to express requirements clearly using UML and BPMN models.

- UML 00 Introduction
- UML 01 UML Overview
- ALM 01 BPMN Diagrams (with exercises)
- ALM 02 Requirements Management (with exercises)
- ALM 03 Requirements Elicitation
- UML 02 Use Case Diagrams (with exercises)
- UML 03 Advanced Use Cases (with exercises)
- UML 04 Activity Diagrams (with exercises)
- UML 05 Object Principles (with exercises)
- UML 06 Domain Models (with exercises)
- UML W3 Analysis Workshop

UML for Systems Architects

4 Days - £5,400 + VAT + expenses *



A comprehensive course for systems architects and software engineers. Focus on technical modules of the course material. Cover all the core UML diagram types and important notation, with extensive practical exercises.

UML 00 Introduction
UML 01 UML Overview
UML 02 Use Case Diagrams (with exercises)
UML 03 Advanced Use Cases (with exercises)
UML 04 Activity Diagrams (with exercises)
UML 05 Object Principles (with exercises)
UML 07 Class Diagrams (with exercises)
UML 08 Advanced Class Diagrams (with exercises)
UML 10 Packages and Subsystems (with exercises)
UML 11 Extending the UML
UML 12 Object Behaviour (with exercises)
UML 13 Sequence Diagrams (with exercises)
UML 14 Communication Diagrams (with exercises)
UML 15 State Machine Diagrams (with exercises)
UML 16 Advanced State Machines (with exercises)
UML W5 OOAD Workshop

UML for Software Project Managers

2 Days - £2,700 + VAT + expenses *



Designed for software project managers and team leaders. Provides an overview of object concepts and UML notation. Address key management challenges including iterative development, requirements management, scheduling, estimating and risk analysis.

One free Circa 2009 software license with every full price 10 delegate project management course!

UML 00 Introduction
UML 01 UML Overview
ALM 06 Iterative Development
ALM 02 Requirements Management (with exercises)
UML 02 Use Case Diagrams (with exercises)
UML 05 Object Principles (with exercises)
ALM 10 Risk Assessment (with exercises)
ALM 11 Estimating (with exercises)
ALM 12 Planning and Scheduling (with exercises)

Add your UML CASE Tool

plus 1 Day - £1,350 + VAT + expenses *



Gain hands-on practical CASE tool experience during your UML training course.

Combine any of our standard UML courses with your own in-house UML CASE tool

Use your CASE tool during all practical exercises and workshops – with trainer led instruction

* Prices quoted for on-site courses with 7 - 10 delegates

3 – 6 delegates: £ 200 per delegate per day
€ 235 per delegate per day

7 – 10 delegates: £ 1,350 per day
€ 1,600 per day

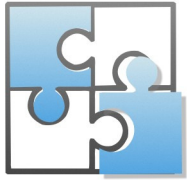
All prices plus VAT and trainer expenses

The customer is required to provide suitable training facilities, including a projector and refreshments.

Prices valid until 31st December 2010.



All trademarks acknowledged.



mix & match

'Mix and Match' – Build your own Custom Course

3 – 6 delegates: £200 per delegate per day + VAT and trainer expenses
7 – 10 delegates: £1,350 per day + VAT and trainer expenses

How does it work? Simple...

- assess the needs of your team and organisation
- choose the modules to best suit your requirements, timescale and budget
- call us or email your selection, preferred dates, location and number of delegates

If you would like assistance please contact us and a qualified trainer will happily discuss your requirements and suggest a suitable course structure.

Training Modules

UML Modules



UML 00 Introduction

½ hour

delegate background and objectives
timetable and practical considerations

UML 01 UML Overview

½ hour

why use graphical notations?
comparison with structured methods
history of UML
contents of a UML model
key UML diagrams
business process models
requirements capture
static and dynamic models
what the UML does not cover

UML 02 Use Case Diagrams

(with exercises)

2½ hours

comparison with traditional requirements
JAD sessions and GUI prototypes
modelling users as actors
external systems
actor definition and notation
actor generalisation
use case definition and notation
use cases and scenarios
use case models and reports

UML 03 Advanced Use Cases

(with exercises)

2 hours

include relationship
extend relationship
use case inheritance
the role of use cases in development

UML 04 Activity Diagrams

(with exercises)

1 hour

modelling business activities and workflow
sequential actions
subactivities
decision and merge (conditional logic)
fork and join (parallel actions)
object state
send, accept and time signals
connectors
swim lanes (responsibility)

UML 05 Object Principles

(with exercises)

2½ hours

modelling real world concepts
classes and object instances
object identity
object responsibilities
encapsulation of attributes
objects as intelligent black boxes
what makes a good class
how to discover classes
whole-part relationships (aggregation)
generalisation and specialisation (inheritance)
polymorphism

UML 06 Domain Models

(with exercises)

2 hours

domain classes and notation
attributes
associations
multiplicity
whole-part relationships (aggregation)
generalisation-specialisation (inheritance)

UML 07 Class Diagrams

(with exercises)

2½ hours

class definition and notation
attributes and operations
visibility
associations
navigability
multiplicity
whole-part relationships (aggregation)
generalisation-specialisation (inheritance)

UML 08 Advanced Class Diagrams

(with exercises)

2 hours

attribute scope and properties
class multiplicity
parameter direction
roles
qualifying associations
constraints
n-ary associations
reflexive associations
association classes
derived information
dependency
template classes
nested classes
composition
abstract classes and operations
multiple inheritance

UML 09 Object Diagrams (with exercises)

1 hour

the difference between a class and an object
object identity
object notation
attribute values of objects
object diagrams
understand multiplicity rules
verify audit trail requirements

UML 10 Packages and Subsystems (with exercises)

1 hour

packages
package dependency
interfaces
interface inheritance
subsystems
system architecture

UML 11 Extending the UML

½ hour

additional class compartments
notes
stereotypes
tagged values
constraints

UML 12 Object Behaviour (with exercises)

1½ hour

objects collaborate
object messaging
modelling the interaction sequence
mapping use cases to the object model
classes, responsibilities and collaborations
boundary, entity and control classes

UML 13 Sequence Diagrams (with exercises)

2 hours

object notation
message passing and sequencing
creation and deletion of objects
asynchronous messages
the system boundary
interaction frames for loops and decisions
centralised control
distributed control

UML 14 Communication Diagrams (with exercises)

1 hour

object notation
message passing and sequencing
asynchronous messages
alternative paths
iteration

UML 15 State Machine Diagrams (with exercises)

2 hours

when to use dynamic models
object lifecycles
states
transitions
events
actions and activities
internal actions and self-transitions

UML 16 Advanced State Machines (with exercises)

1 hour

guard conditions
automatic transitions
nested states
concurrent states

UML 17 Concurrency and Real-time Models

½ hour

rationale for concurrency
processes and threads
active classes
mapping classes to processes
asynchronous messages
timing on sequence diagrams
concurrent states and synch states

UML 18 Design Patterns (with exercises)

1½ hours

what is a design pattern?
documenting patterns
creational patterns
factory
singleton
structural patterns
composite pattern
adaptor patterns
bridge pattern
behavioural patterns
state pattern
iterator pattern
command pattern

UML 19 Mapping to RDBMS

½ hour

persistence and relational databases
wrapper classes and factories
storing classes and attributes
recording associations
many to many relationships
mapping inheritance

UML W1 BPMN Workshop

2 hours

role play to identify processes and activities
build a business process model

UML W2 Requirements Workshop

3½ hours

- as BPMN Workshop plus:
create a use case model
planning session
capture requirements in use case reports

UML W3 Analysis Workshop

4 hours

- as Requirements Workshop plus:
model use case logic using an activity diagram
construct a domain model

UML W4 Design Workshop

5 hours

- as Analysis Workshop plus:
explore object interactions
analyse object states

UML W5 OOAD Workshop

3½ hours

build an analysis level class model
create a use case diagram for system requirements
create use case reports for priority use cases
create a sequence and a detailed class diagram
model a class lifecycle as a state machine diagram

Application Lifecycle Management Modules

ALM 01 BPMN Diagrams

(🔗 with exercises)

2 hours

modelling business processes
activities and sequence flow
gateways for logic
types of activities and subprocesses
gateway types and parallel logic
pools and lanes for responsibility
message flows
intermediate events and event types
data objects

ALM 02 Requirements Management

(🔗 with exercises)

1½ hours

why manage requirements?
definition of quality
identify stakeholder needs
problem definition
requirements management challenges
gathering requirements
use case models
1-10-100 rule
traceability
control scope creep
change control process

ALM 03 Requirements Elicitation

1 hour

interviews
workshops
observation
prototyping
scenario analysis
documentation analysis
questionnaires and surveys
special purpose records

ALM 04 System Architecture

1 hour

architectural views
business process modelling
n-tier layered logical architecture
interface and control objects
persistence and wrapper objects
physical architecture

ALM 05 Component-Based Development

½ hour

what is CBD?
drivers for CBD
designing component-based systems
what makes a good component
wrapping legacy systems
distributed communications
component marketplace
logical component architecture
physical component architecture
deployment

ALM 06 Iterative Development

1 hour

what is a development process?
waterfall development
iterative and incremental development
development processes
when to use prototypes
project lifecycle
process, organisation and architecture
impact on organisation
planning for re-use
reducing risk

ALM 07 Rational Unified Process

1 hour

use case driven, architecture centric development
iterative and incremental process
phases and iterations
inception phase
elaboration phase
construction phase
transition phase
process workflows

ALM 09 DSDM

1 hour

DSDM principles
when to use DSDM
DSDM lifecycle
feasibility and business study phase
functional model iterations
design and build iterations
implementation
project management
team structures
involving users
JAD workshops

ALM 10 Risk Assessment

(🔗 with exercises)

2 hours

identify and classify risks
typical software development risks
assess risk impact and probability
calculate risk exposure
assign risk priority
develop contingency plans
add contingency to estimates
project risk profiles
schedule to reduce risk

ALM 11 Estimating

(🔗 with exercises)

2½ hours

what's the problem?
setting and meeting deadlines
impact of inaccurate estimates
key role of project managers
the devil's triangle and pyramid
when to estimate
a scientific approach
traditional estimating approaches
UML estimation
identify project scope
productivity metrics
calculating an estimate
qualify the scope
apply an activity profile
automate estimating

ALM 12 Planning and Scheduling (with exercises)

2 hours

prerequisites for successful projects
multi-level plans
iterative processes
timeboxing
the 'Mythical Man-Month'
optimism versus caution
user involvement
iteration review
planning for deployment
software process improvement

ALM 13 Team Management

½ hour

conditions for success
project roles
resource skill profile
acquiring skills
team structure
building a team
management style
motivation
communication
user involvement
a centre of excellence

ALM 14 Tools and Technologies

½ hour

CASE tools
management tools
programming languages
integrated development environments