

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 or hands-on sessions relating to each of the key concepts taught. Theory is regularly updated to reflect the latest UML, SysML and BPMN notations and Enterprise Architect and Circa product features.

Tassc provides a flexible approach to training:

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

EA Essentials

1 Day - £1,350 + VAT + expenses *



Aimed at anyone who needs an overview of Enterprise Architect's capabilities and an opportunity to experience producing some of the core UML diagrams.

Prerequisite: UML Essentials or similar

EA for Business Analysts

1½ Days - £2,025 + VAT + expenses *



Ideal for business and systems analysts who already have experience of using BPMN and UML to model and analyse their requirements. This course includes hands-on sessions to produce and document these models in Enterprise Architect.

Prerequisite: UML and BPMN for Business Analysts or similar

EA for Systems Architects

2 Days - £2,700 + VAT + expenses *



Ideal for systems architects and software engineers who already have UML experience and now wish to gain confidence in using Enterprise Architect. Includes substantial hands-on sessions to produce comprehensive UML models within the Enterprise Architect environment.

Prerequisite: UML for Systems Architects or similar

EA for Systems Engineers

2 Days - £2,700 + VAT + expenses *



Designed for systems engineers who already have SysML experience and now wish to gain confidence in using Enterprise Architect. Includes substantial hands-on sessions to construct SysML models within the Enterprise Architect environment.

Prerequisite: Knowledge of SysML theory and notation

NEW

EA RTF Document Template Workshop

1 Day - £1,350 + VAT + expenses *

2 Days - £2,700 + VAT + expenses *



A workshop which teaches delegates how to create RTF templates to allow them to generate company documentation straight from Enterprise Architect.

Day 2 (optional)
Trainer led workshop to create your own company specific RTF document templates






NEW

Requirements Modelling with Use Cases and EA

2 Days - £2,700 + VAT + expenses *



Ideal for requirements engineers and business analysts new to Use Case models and Enterprise Architect. Learn all about documenting requirements as use cases and how best to provide traceability. Combine this with practical knowledge of how to construct these models within Enterprise Architect.

<p>Business Process Modelling with BPMN and EA 1 Day - £1,350 + VAT + expenses *</p>		<p>Designed for business analysts new to BPMN and Enterprise Architect. Learn BPMN syntax and semantics. Create hierarchical business process models within Enterprise Architect.</p>
<p>UML, BPMN and EA for Business Analysts 3 Days - £4,050 + VAT + expenses *</p>		<p>Designed for business and systems analysts tasked with defining system requirements. Gain a good overall exposure to the main concepts and notations of BPMN and UML. Learn how to express requirements clearly and document them within Enterprise Architect. Includes substantial hands-on sessions within the Enterprise Architect environment.</p>
<p>UML and EA for Systems Architects 4 Days - £5,400 + VAT + expenses *</p>		<p>Designed for systems architects and software engineers who are new to UML and Enterprise Architect. Gain a good overall exposure to the main concepts and notation used in object-oriented analysis and design. Focus on the core diagram types and a practical everyday subset of the UML. Includes substantial hands-on sessions to produce UML models within the Enterprise Architect environment.</p>
<p>SysML and EA for Systems Engineers 4 Days - £5,400 + VAT + expenses *</p>		<p>Designed for systems engineers who are new to SysML and Enterprise Architect. Gain a good overall exposure to the main concepts and notation used in SysML. Includes substantial hands-on sessions to produce SysML diagrams using Enterprise Architect.</p>
<p>UML Essentials 2 Days - £2,700 + VAT + expenses *</p>		<p>Useful for anyone who needs an introduction to object technology and UML.</p>
<p>Requirements Modelling with Use Cases 1 Day - £1,350 + VAT + expenses *</p>		<p>Designed for requirements engineers and business analysts who wish to learn how best to capture and document requirements using use cases.</p>
<p>Business Process Modelling with BPMN ¾ Day - £1,000 + VAT + expenses *</p>		<p>Aimed at business analysts who need to understand and document business processes.</p>
<p>Requirements Analysis with BPMN and Use Cases 2 Days - £2,700 + VAT + expenses *</p>		<p>Designed for business analysts who need to understand and document business processes and devise a set of requirements as a use case model.</p>

NEW

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 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 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!

Add your UML CASE Tool

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



Combine any of our standard UML courses with your in-house UML CASE tool. Use your CASE tool during all practical exercises and workshops – with trainer led instruction

Planning and Estimating with Circa

2 Days - £2,700 + VAT + expenses *



A comprehensive guide to estimating UML software development aimed at project managers and team leaders using or evaluating Circa. Learn how to produce high-level estimates for bids or feasibility and refine estimates for project plans and schedules. Assess risk and build in appropriate contingency.

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

* 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. Prices valid until 31st December 2010.

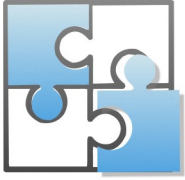
The customer is required to provide suitable training facilities, including a projector, delegate access to EA or Circa running on laptops or PCs (if appropriate) and refreshments.

For more details on the module content of each of the above training courses – download one of the following catalogues from Tassc's website:

EA Course Catalogue
UML and BPMN Course Catalogue
Circa Course Catalogue



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

Enterprise Architect Modules



EA 00 Introduction

½ hour

delegate background and objectives
timetable and practical considerations

EA 01 Navigation

1 hour

what is Enterprise Architect?
model management
user interface
menus and toolbars
UML diagrams
UML toolbox
project browser
properties and notes windows
creating model elements
deleting model elements
model structure and views
🖨 navigation

EA 02 BPMN Diagrams

1½ hour

creating BPMN diagrams
activities and sequence flow
sub-processes
different types of events
logic using gateways
pools and lanes
🖨 BPMN diagrams

EA 03 Requirements Diagrams

1 hour

organising requirements
documenting requirements
relating requirements
prioritising requirements
🖨 requirements diagrams

EA 04 Use Case Diagrams

1½ hours

creating use case diagrams
creating and documenting actors
defining use cases
documenting scenarios
adding use case relationships
organising the use case model
🖨 use case diagrams

EA 05 Requirements Traceability

½ hour

creating realize relationships
using a diagram to demonstrate traceability
using a matrix to cross-reference requirements
🖨 requirements traceability

EA 06 Activity Diagrams

1 hour

creating activity diagrams
adding actions and transitions
modelling decisions and parallel actions
adding send, accept and time signals
using swim lanes or partitions
🖨 activity diagrams

EA 07 Domain Models

1½ hours

creating domain models
creating business classes
defining attributes
adding associations
defining multiplicity
modelling aggregation
creating inheritance hierarchies
🖨 domain models

EA 08 Class Diagrams

2 hours

creating class diagrams
creating classes
specifying class details
defining attributes
defining operations and parameters
adding associations
defining multiplicity and navigability
modelling aggregation and composition
creating inheritance hierarchies
modelling abstract classes and operations
adding management information
using tagged values
organising the class model
🖨 class diagrams

EA 09 Code Generation

½ hour

code generation
reverse engineering
model synchronization
🖨 code generation


EA 10 System Architecture

1 hour

modelling package dependencies
creating subsystems
defining interfaces
creating components
adding assemblies
creating a deployment diagram
adding components to nodes
🖨 system architecture


EA 11 Sequence Diagrams

1½ hours

creating sequence diagrams
adding objects
object messages
using fragments for logic
creating stereotypes
defining a use case realization
diagram navigation with hyperlinks
 sequence diagrams


EA 12 Communication Diagrams

½ hour

creating communication diagrams
adding objects
object messages
message sequence numbering
showing conditions and iteration
 communication diagrams


EA 13 State Machine Diagrams

1 hour

creating state machine diagrams
adding states and transitions
defining events, conditions and actions
adding entry, exit and do actions to states
showing nested states and history
 state machine diagrams


EA 14 Design Patterns

1 hour

document a design pattern using a UML model
export a design pattern
import a design pattern
apply a design pattern
 design patterns

EA 15 Relational Databases

½ hour

creating database tables
adding columns
creating primary and foreign keys
creating indexes and triggers
 relational databases


EA 16 Team Working

½ hour

packages and responsibility
using a shared network drive
creating replica projects
connecting to a DBMS repository
exporting files using XML
defining controlled packages
baselines and differences


EA 17 Generating Documents

½ hour

producing RTF documents
customising RTF documents
producing HTML documents
customising HTML documents
 generating documents

EA 18 Block Definition Diagrams


1½ hours

creating block definition diagrams
adding blocks
parts, references, values and behaviour
flow ports and item flow
 block definition diagrams

NEW

EA 19 Internal Block Diagrams


1 hour

creating internal block diagrams
adding part properties
connecting parts
internal information flow
 internal block diagrams

NEW

EA 20 Parametric Diagrams


1 hour

creating constraint blocks
creating parametric diagrams
adding constraint properties
adding parameters
connecting constraint properties
 parametric diagrams

NEW

EA 21 RTF Templates

2½ hours

generating RTF documents
RTF document options
creating RTF templates
RTF editor
sections window
adding, removing or reordering sections
recursion of packages and elements
content window
editing and formatting text
inserting additional fields
headers and footers
table of contents
RTF settings
 RTF templates

NEW

EA 22 Advanced RTF Templates


2½ hours

importing company styles
producing tabular output
editing styles
numbering
extracting linked documents
extracting tagged values
applying document filters
using project constants
word substitution for foreign language reports
 advanced RTF templates

NEW

EA 23 RTF Virtual Documents

1½ hour

master and model documents
creating master documents
creating model documents
using tagged values to assign templates
adding content to model documents
 RTF virtual documents

NEW



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
modeling 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 patterns

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

Circa Modules

CIRCA 00 Introduction

½ hour

delegate background and objectives
timetable and practical considerations

CIRCA 01 Estimating UML Projects

(📄 with exercises)

1½ 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
traditional estimating approaches
ObjectMetrix model and Circa preview

CIRCA 02 Defining Project Scope

(📄 with hands-on)

1 hour

understanding requirements
identify software artifacts
standard and custom software classifiers
model software evolution
qualify software artifacts
extending existing systems
import software artifacts from a CASE tool
auto populate with software artifacts
control scope creep

CIRCA 03 Calculating Effort, Duration and Cost

(📄 with hands-on)

1 hour

perception and reality
optimism versus caution
accuracy versus precision
first cut estimate
activity breakdown
impact of qualifiers and technologies
the 'Mythical Man-Month'
calculate duration and cost

CIRCA 04 Applying Metrics

(📄 with hands-on)

1 hour

what is a software classifier?
productivity metrics
baseline adjustments
population ratios and activity profiles
refine metric values
technology metrics
adjust qualifier and risk impacts
software defect profile

SysML Modules



SYS 01 SysML Overview

½ hour

why use graphical notation?
comparison with structured methods
history of UML and SysML
SysML and UML relationship
SysML and UML diagram types
document processes and requirements
design system structure and dynamics
what the SysML does not cover

NEW



CIRCA 05 Profiling Resources

(📄 with hands-on)

½ hour

the resource pool
resource profiles and calendars
team structure and size
allocating workers to teams

CIRCA 06 The Whole Product

(📄 with hands-on)

½ hour

turn software into a product
organise with production categories
define production artifacts for non-software activities

CIRCA 07 Reporting and Tracking Defects

(📄 with hands-on)

½ hour

report software and production defects
assess and prioritise defects
track and fix defects

CIRCA 08 Assessing Risk

(📄 with hands-on)

1 hour

identify and classify risks
assess risk impact and probability
risk priority and contingency plans
calculate risk exposure
add contingency to estimates

CIRCA 09 Scheduling Tasks

(📄 with hands-on)

1½ hours

define the development process
allocate software, production and defects to tasks
allocate workers to tasks
create task dependencies on Gantt chart
review resource utilisation
export schedule to MS Project
monitor progress and record actuals

CIRCA W1 📄 Circa Workshop

3½ hours

case study using Circa
populate a project with software artifacts
produce estimates of effort
alter metrics and see the impact on estimates
define team structure to calculate duration and cost
add production artifacts and update estimates
record defects and update estimates
assess risk and add contingency to estimates
define a process structure and schedule work