EA and Behavioural Models

This course is designed for software and systems engineers who would like to learn how to create dynamic models in Enterprise Architect. Delegates are taught how to create activity diagrams, sequence diagrams and state machines. This course is highly practical with many hands-on exercises.

Location:	Webinar
Time:	1 day – see public schedule for dates and times
Cost:	£250 + VAT per delegate (7 delegates maximum)
Prerequisites:	Basic Enterprise Architect experience is expected. If new to Enterprise Architect consider attending our "EA Fundamentals" course first.
Equipment:	To attend this webinar delegates require a PC or laptop running Enterprise Architect with an Internet connection (a headset can be helpful). If you wish to test your environment join a test WebEx meeting: https://www.webex.com/test-meeting.html
	A trial version of Enterprise Architect is fine for training and can be downloaded from Sparx Systems website: www.sparxsystems.com/products/ea/trial.html. It is also helpful to have a mouse as this makes creating diagrams much easier.
Course Style:	50% theory, 50% practical Each module is accompanied by hands-on exercises to allow delegates to apply the theory and become confident using Enterprise Architect.
Delegate Handouts:	Each delegate receives a booklet containing all the course slides and comprehensive theory notes which form excellent reference material. Booklets also contain exercises and suggested solutions. Following successful completion of the course each delegate receives a certificate.

Course Modules:

			Theory	EA	Notation		Exercise	Hands-on
HIPPO 00	Introduction	½ hour						
HIPPO 76+	EA + UML/SysML Activity Diagrams	1½ hours	✓	✓	UML	SysML		✓
HIPPO 82+	EA + UML/SysML Sequence Diagrams	2 hours	✓	✓	UML	SysML		✓
HIPPO 84+	EA + UML/SysML State Machines	1½ hours	✓	✓	UML	SysML		✓

Modules

HIPPO 00	Introduction

- Delegate background and objectives
- Timetable and course outline

HIPPO 76+	EA + UML/SysML Activity Diagrams

	1 hour
EA Hands-On Exercises	½ hour

- Create activity diagrams in EA
- Document business activities and workflow
- Model sequential actions
- Add actions and control flow in EA
- Decision and merge (conditional logic)
- Fork and join (parallel logic)
- Model decisions and parallel actions in EA
- Object states and action pins
- Add action pins in EA
- Send, accept and time signals
- Model send, accept and time signals in EA
- Swimlanes for responsibility
- Use swimlanes or partitions in EA

HIPPO 82+	EA + UML/SysML Sequence Diagrams

	1 hour
EA Hands-On Exercises	1 hour

- Create sequence diagrams in EA
- Object notation and lifelines
- Message passing and sequencing
- Actors and the system boundary
- Add objects, messages and returns in EA
- Communicate using interfaces in EA
- Asynchronous messages
- Show asynchronous messages in EA
- Create and delete objects
- Create and destroy objects in EA
- Interaction frames for loops and decisions
- Use fragments for logic in EA
- Centralised versus distributed control

HIPPO 84+	EA + UML/SysML State Machines

	1 hour
EA Hands-On Exercises	½ hour

- Create state machine diagrams in EA
- When to use state machines
- Object lifecycles and states
- Transitions, events and actions
- Guard conditions
- Add states and transitions in EA
- Define events, conditions and actions in EA
- Entry, exit and do events
- Internal actions and self-transitions
- Add entry, exit and do events to states in EA
- Nested states and the history symbol
- Show nested states and history in EA