Hippo Software
BPMN and UML Training

www.hippo-software.co.uk

Icon Key:

	Teaches theory – concepts and notation
	Teaches practical use of Enterprise Architect
	Covers BPMN, UML, SysML, ArchiMate
	Includes paper exercises, EA hands-on exercises

BPMN Courses

BPMN for Business Process Modelling	1 day					

UML Courses

UML Fundamentals	1 day					
UML for Business Analysis	3 days					
UML for Software Analysis and Design	4 days					

BPMN and UML Courses

BPMN and UML for Business Analysis	3 days					

On-Site Training

Traditional trainer led interactive training delivered at your own offices:

Number of Delegates	Course Price Per Day *
1-6	£1300
7-9	£1500
10-12	£1700
13-15	£1900

Webinar Training

An alternative approach which can work well for a small number of delegates or those based outside the UK:

Number of Delegates	Webinar Price Per Day *
1	£500
2-3	£800
4-5	£1000

Custom Training

Alternatively why not select modules from our catalogue to create your own custom training course...

Remember to allow enough time for exercises to reinforce the theory learned!

BPMN and UML Consulting

Hippo Software consultants can help you to:

- Conduct technical reviews and facilitate workshops
- Capture requirements and business processes
- Architect and design object-oriented solutions
- Devise and document standards and guidelines

Number of Days	Consulting Price Per Day *
1-4	£950
5-9	£900
10 or more	£850

* plus VAT (where applicable) and expenses.
Prices valid until 31st December 2020.
We can provide a quotation in Euros or US Dollars if required.

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BPMN for Business Process Modelling

This course is designed for business analysts who are new to BPMN. Delegates are taught how to create a set of hierarchical BPMN diagrams to understand and document business processes. Practical exercises and a workshop reinforce the theory.

Duration: 1 day

Prerequisites: No prior BPMN experience is required.
A background in business process modelling is helpful.

Equipment:

For on-site delivery the customer should provide a suitable training room with a screen or projector to connect to our trainer's laptop and a whiteboard or flipchart. All exercises are completed on paper therefore no PCs or laptops are required.

For webinar delivery delegates require a PC or laptop with an Internet connection (a headset can be helpful). If you wish to test your environment join a test WebEx meeting: www.webex.com/test-meeting.html

Course Style: 25% theory, 75% practical.
Each module is accompanied by targeted exercises to allow delegates to apply the theory and become confident with new concepts and notation.

Delegate Handouts: Each delegate receives a folder containing all the course slides and comprehensive theory notes which form excellent reference material. Folders 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 01	BPMN Overview	½ hour	✓		✓		
HIPPO 02	BPMN Process Essentials	1½ hours	✓		✓	✓	
HIPPO 03	BPMN Process Advanced	1½ hours	✓		✓	✓	
HIPPO 04	BPMN Collaboration	½ hour	✓		✓	✓	
HIPPO 05	BPMN Conversation	½ hour	✓		✓	✓	
HIPPO 06	BPMN Choreography	½ hour	✓		✓	✓	
HIPPO W0	BPMN Process Workshop	2½ hours			✓	✓	

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UML Fundamentals

This course provides an ideal introduction to UML. The focus is on the most commonly used UML diagram types. The course is suitable for project managers, team leaders, business analysts and anyone who needs an introduction to object technology and UML.

Duration: 1 day

Prerequisites: No prior UML experience is required.
A background in software analysis is helpful.

Equipment:

For on-site delivery the customer should provide a suitable training room with a screen or projector to connect to our trainer's laptop and a whiteboard or flipchart. All exercises are completed on paper therefore no PCs or laptops are required.

For webinar delivery delegates require a PC or laptop with an Internet connection (a headset can be helpful). If you wish to test your environment join a test WebEx meeting: www.webex.com/test-meeting.html

Course Style: 55% theory, 45% practical.
Each module is accompanied by targeted exercises to allow delegates to apply the theory and become confident with new concepts and notation.

Delegate Handouts: Each delegate receives a folder containing all the course slides and comprehensive theory notes which form excellent reference material. Folders 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 10	UML Overview	½ hour	✓		✓		
HIPPO 13	UML Use Case Essentials	2½ hours	✓		✓	✓	
HIPPO 16	UML Object Oriented Concepts	2½ hours	✓		✓	✓	
HIPPO 17	UML Domain Models	2 hours	✓		✓	✓	

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UML for Business Analysis

This course is aimed at business analysts who are new to UML. Delegates are taught how to create activity diagrams to understand business processes, capture end user requirements using use cases and define data with domain models. Practical exercises and workshops help to reinforce the theory.

Duration: 3 days

Prerequisites: No prior UML experience is required.
A background in business analysis is helpful.

Equipment:

For on-site delivery the customer should provide a suitable training room with a screen or projector to connect to our trainer's laptop and a whiteboard or flipchart. All exercises are completed on paper therefore no PCs or laptops are required.

For webinar delivery delegates require a PC or laptop with an Internet connection (a headset can be helpful). If you wish to test your environment join a test WebEx meeting: www.webex.com/test-meeting.html

Course Style: 40% theory, 60% practical.
Each module is accompanied by targeted exercises to allow delegates to apply the theory and become confident with new concepts and notation.

Delegate Handouts: Each delegate receives a folder containing all the course slides and comprehensive theory notes which form excellent reference material. Folders 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 10	UML Overview	½ hour	✓		✓		
HIPPO 11	UML Requirements	½ hour	✓		✓		
HIPPO 12	UML Requirements Elicitation	½ hour	✓		✓		
HIPPO 13	UML Use Case Essentials	2½ hours	✓		✓	✓	
HIPPO 14	UML Use Case Advanced	2 hours	✓		✓	✓	
HIPPO 15	UML Activity Diagrams	1 hour	✓		✓	✓	
HIPPO 16	UML Object Oriented Concepts	2½ hours	✓		✓	✓	
HIPPO 17	UML Domain Models	2 hours	✓		✓	✓	
HIPPO W1	UML Process Workshop	2½ hours			✓	✓	
HIPPO W2	UML Requirements Workshop	1 hour			✓	✓	
HIPPO W3	UML Analysis Workshop	1 hour			✓	✓	

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UML for Software Analysis and Design

This course is designed for software engineers and systems architects who are new to UML. Delegates are taught how to create the most commonly used UML diagram types to analyse requirements and create static and dynamic designs. Practical exercises and workshops help to reinforce the theory.

Duration: 4 days

Prerequisites: No prior UML experience is required.
A background in software analysis and design is helpful.

Equipment:

For on-site delivery the customer should provide a suitable training room with a screen or projector to connect to our trainer's laptop and a whiteboard or flipchart. All exercises are completed on paper therefore no PCs or laptops are required.

For webinar delivery delegates require a PC or laptop with an Internet connection (a headset can be helpful). If you wish to test your environment join a test WebEx meeting: www.webex.com/test-meeting.html

Course Style: 40% theory, 60% practical.
Each module is accompanied by targeted exercises to allow delegates to apply the theory and become confident with new concepts and notation.

Delegate Handouts: Each delegate receives a folder containing all the course slides and comprehensive theory notes which form excellent reference material. Folders 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 10	UML Overview	½ hour	✓		✓		
HIPPO 13	UML Use Case Essentials	2½ hours	✓		✓	✓	
HIPPO 14	UML Use Case Advanced	2 hours	✓		✓	✓	
HIPPO 15	UML Activity Diagrams	1 hour	✓		✓	✓	
HIPPO 16	UML Object Oriented Concepts	2½ hours	✓		✓	✓	
HIPPO 18	UML Class Essentials	2 hours	✓		✓	✓	
HIPPO 19	UML Class Advanced	2 hours	✓		✓	✓	
HIPPO 20	UML Component Diagrams	½ hour	✓		✓	✓	
HIPPO 21	UML Deployment Diagrams	½ hour	✓		✓	✓	
HIPPO 22	UML Object Interactions	1½ hours	✓		✓	✓	
HIPPO 23	UML Sequence Diagrams	2 hours	✓		✓	✓	
HIPPO 24	UML Communication Diagrams	1 hour	✓		✓	✓	
HIPPO 25	UML State Machine Essentials	1½ hours	✓		✓	✓	
HIPPO 26	UML State Machine Advanced	1 hour	✓		✓	✓	
HIPPO 27	UML Design Patterns	1½ hours	✓		✓	✓	
HIPPO 28	UML Map to Relational Databases	½ hour	✓		✓		
HIPPO W1	UML Process Workshop	2½ hours			✓	✓	
HIPPO W2	UML Requirements Workshop	1 hour			✓	✓	
HIPPO W3	UML Analysis Workshop	1 hour			✓	✓	
HIPPO W4	UML Design Workshop	1 hour			✓	✓	

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BPMN and UML for Business Analysis

This course is aimed at business analysts who are new to BPMN and UML. Delegates are taught how to create BPMN diagrams to understand business processes, capture end user requirements using use cases and define data with domain models. Practical exercises and workshops reinforce the theory.

Duration: 3 days

Prerequisites: No prior BPMN or UML experience is required.
A background in business analysis is helpful.

Equipment:

For on-site delivery the customer should provide a suitable training room with a screen or projector to connect to our trainer's laptop and a whiteboard or flipchart. All exercises are completed on paper therefore no PCs or laptops are required.

For webinar delivery delegates require a PC or laptop with an Internet connection (a headset can be helpful). If you wish to test your environment join a test WebEx meeting: www.webex.com/test-meeting.html

Course Style: 40% theory, 60% practical.
Each module is accompanied by targeted exercises to allow delegates to apply the theory and become confident with new concepts and notation.

Delegate Handouts: Each delegate receives a folder containing all the course slides and comprehensive theory notes which form excellent reference material. Folders 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 01	BPMN Overview	½ hour	✓		✓		
HIPPO 02	BPMN Process Essentials	1½ hours	✓		✓	✓	
HIPPO 03	BPMN Process Advanced	1½ hours	✓		✓	✓	
HIPPO 04	BPMN Collaboration	½ hour	✓		✓	✓	
HIPPO 05	BPMN Conversation	½ hour	✓		✓	✓	
HIPPO 06	BPMN Choreography	½ hour	✓		✓	✓	
HIPPO 10	UML Overview	½ hour	✓		✓		
HIPPO 11	UML Requirements	½ hour	✓		✓		
HIPPO 12	UML Requirements Elicitation	½ hour	✓		✓		
HIPPO 13	UML Use Case Essentials	2½ hours	✓		✓	✓	
HIPPO 14	UML Use Case Advanced	2 hours	✓		✓	✓	
HIPPO 15	UML Activity Diagrams	1 hour	✓		✓	✓	
HIPPO 16	UML Object Oriented Concepts	2½ hours	✓		✓	✓	
HIPPO 17	UML Domain Models	2 hours	✓		✓	✓	
HIPPO W0	BPMN Process Workshop	2½ hours			✓	✓	
HIPPO W2	UML Requirements Workshop	1 hour			✓	✓	
HIPPO W3	UML Analysis Workshop	1 hour			✓	✓	

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BPMN Module Catalogue

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Icon Key:

	Teaches theory – concepts and notation
	Teaches practical use of Enterprise Architect
	Covers BPMN, UML, SysML and/or ArchiMate
	Includes paper exercises, EA hands-on exercises

BPMN Module Summary

			Theory	EA	Notation	Exercise	Hands-on
HIPPO 00	Introduction	½ hour					
HIPPO 01	BPMN Overview	½ hour					
HIPPO 02	BPMN Process Essentials	1½ hours					
HIPPO 03	BPMN Process Advanced	1½ hours					
HIPPO 04	BPMN Collaboration	½ hour					
HIPPO 05	BPMN Conversation	½ hour					
HIPPO 06	BPMN Choreography	½ hour					
HIPPO W0	BPMN Process Workshop	2½ hours					

BPMN Modules

HIPPO 00	Introduction
	½ hour

- Delegate background and objectives
- Timetable and course outline

HIPPO 01	BPMN Overview
	½ hour

- What is BPMN?
- Business process models
- 4 BPMN diagram types

HIPPO 02	BPMN Process Essentials
	½ hour
Paper Exercises	1 hour

- Start and end events
- Activities and sequence flow
- Exclusive and parallel gateways for logic
- Intermediate events
- Message and timer events
- Data stores and data objects
- Tasks and sub-processes
- Allocate responsibility with pools and lanes

HIPPO 03	BPMN Process Advanced
	½ hour
Paper Exercises	1 hour

- Conditional and default sequence flows
- Markers for activity behaviour and task types
- Event types
- Edge mounted events
- Transactions and compensation
- Inclusive and event gateway types

HIPPO 04	BPMN Collaboration
	¼ hour
Paper Exercises	¼ hour

- Black box pools
- Message flows between pools
- Initiating and responding message icons

HIPPO 05	BPMN Conversation
	¼ hour
Paper Exercises	¼ hour

- Black box pools
- Conversations and links

HIPPO 06	BPMN Choreography
	¼ hour
Paper Exercises	¼ hour

- Choreography tasks
- Initiating and responding message icons

BPMN Workshop Module

HIPPO W0	BPMN Process Workshop
Paper Exercises	2½ hours

- Role play to identify processes and activities
- Build business process model

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UML Module Catalogue

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UML Module Summary

			Theory	EA	Notation	Exercise	Hands-on
HIPPO 00	Introduction	½ hour					
HIPPO 10	UML Overview	½ hour					
HIPPO 11	UML Requirements	½ hour					
HIPPO 12	UML Requirements Elicitation	½ hour					
HIPPO 13	UML Use Case Essentials	2½ hours					
HIPPO 14	UML Use Case Advanced	2 hours					
HIPPO 15	UML Activity Diagrams	1 hour					
HIPPO 16	UML Object Oriented Concepts	2½ hours					
HIPPO 17	UML Domain Models	2 hours					
HIPPO 18	UML Class Essentials	2 hours					
HIPPO 19	UML Class Advanced	2 hours					
HIPPO 20	UML Component Diagrams	½ hour					
HIPPO 21	UML Deployment Diagrams	½ hour					
HIPPO 22	UML Object Interactions	1½ hours					
HIPPO 23	UML Sequence Diagrams	2 hours					
HIPPO 24	UML Communication Diagrams	1 hour					
HIPPO 25	UML State Machine Essentials	1½ hours					
HIPPO 26	UML State Machine Advanced	1 hour					
HIPPO 27	UML Design Patterns	1½ hours					
HIPPO 28	UML Map to Relational Databases	½ hour					
HIPPO W1	UML Process Workshop	2½ hours					
HIPPO W2	UML Requirements Workshop	1 hour					
HIPPO W3	UML Analysis Workshop	1 hour					
HIPPO W4	UML Design Workshop	1 hour					

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UML Modules

HIPPO 00 Introduction

½ hour

- Delegate background and objectives
- Timetable and course outline

HIPPO 10 UML Overview

½ hour

- Advantages of graphical notations
- History of UML
- Key UML diagrams
- Business process models
- Requirements capture
- Static and dynamic models

HIPPO 11 UML Requirements

½ hour

- Importance of managing requirements
- Differentiate needs from solutions
- Requirements traceability
- Strategies to control scope creep
- Document requirements
- Requirements levels and relationships
- Categorise requirements

HIPPO 12 UML Requirements Elicitation

½ hour

- What information to gather
- Sources of information
- Top 8 requirements elicitation techniques
- When to use each technique
- Common problems with elicitation

HIPPO 13 UML Use Case Essentials

1 hour

Paper Exercises 1½ hours

- Comparison with traditional requirements
- Workshops and GUI prototypes
- Model users as actors
- External systems and timers
- Actor definition and notation
- Actor generalisation
- Use case and scenario definition
- Use case notation
- Use case diagrams

HIPPO 14 UML Use Case Advanced

1 hour

Paper Exercises 1 hour

- Use case specification
- Use cases drive development
- Include relationship
- Extend relationship
- Use case inheritance

HIPPO 15 UML Activity Diagrams

½ hour

Paper Exercises ½ hour

- Document business activities and workflow
- Model sequential actions
- Nested and structured activities
- Decision and merge (conditional logic)
- Fork and join (parallel logic)
- Object states and action pins
- Send, accept and time signals
- Swimlanes for responsibility

HIPPO 16 UML Object Oriented Concepts

1 hour

Paper Exercises 1½ hour

- Model real world concepts
- Classes and objects
- Object identity and responsibilities
- Encapsulation of attributes
- Objects as intelligent black boxes
- What makes a good class
- How to discover classes
- Whole-part relationships (aggregation)
- Generalisation-specialisation (inheritance)
- Polymorphism

HIPPO 17 UML Domain Models

1 hour

Paper Exercises 1 hour

- Domain classes and notation
- Attributes
- Associations and multiplicity
- Whole-part relationships (aggregation)
- Generalisation-specialisation (inheritance)

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HIPPO 18 UML Class Essentials

1 hour

Paper Exercises 1 hour

- Class definition and notation
- Attributes, operations and parameters
- Visibility
- Associations, multiplicity and direction
- Whole-part relationships (aggregation)
- Generalisation-specialisation (inheritance)

HIPPO 19 UML Class Advanced

1 hour

Paper Exercises 1 hour

- Attribute scope and properties
- Class multiplicity
- Parameter direction on operations
- Roles and association qualifier
- Constraints
- Reflexive associations
- Association classes and derived information
- Stereotypes and tagged values
- Additional class compartments
- Nested classes and composition
- Abstract classes and operations
- Multiple inheritance

HIPPO 20 UML Component Diagrams

¼ hour

Paper Exercises ¼ hour

- Design component-based systems
- Build or buy components
- Understand interfaces and services
- Logical component architecture

HIPPO 21 UML Deployment Diagrams

¼ hour

Paper Exercises ¼ hour

- Define network nodes and devices
- Document communication mechanisms
- Assign components to nodes

HIPPO 22 UML Object Interactions

½ hour

Paper Exercises 1 hour

- Object collaboration and messaging
- Map use cases to the class model
- Classes, responsibilities and collaborations
- Boundary, control and entity classes

HIPPO 23 UML Sequence Diagrams

1 hour

Paper Exercises 1 hour

- Object notation and lifelines
- Message passing and sequencing
- Actors and the system boundary
- Asynchronous messages
- Create and delete objects
- Interaction frames for loops and decisions
- Centralised verses distributed control

HIPPO 24 UML Communication Diagrams

½ hour

Paper Exercises ½ hour

- Object notation and links
- Message passing and sequencing
- Asynchronous messages
- Alternative paths and loops

HIPPO 25 UML State Machine Essentials

½ hour

Paper Exercises 1 hour

- When to use state machines
- Object lifecycles and states
- Transitions and events
- Actions
- Entry, exit and do events

HIPPO 26 UML State Machine Advanced

½ hour

Paper Exercises ½ hour

- Guard conditions
- Internal events and self-transitions
- Automatic transitions
- Nested states and the history symbol
- Concurrent states

HIPPO 27 UML Design Patterns

1 hour

Paper Exercises ½ hour

- Advantages of design patterns
- Document design patterns
- Creational patterns (factory, singleton)
- Structural patterns (composite, adaptor, bridge)
- Behavioural patterns (state, iterator, command)

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HIPPO 28	UML Map to Relational Databases
	½ hour

- Persistence and relational databases
- Wrapper classes and factories
- Store classes and attributes
- Record associations
- Many to many relationships
- Mapping inheritance

UML Workshop Modules

HIPPO W1	UML Process Workshop
	Paper Exercises 2½ hours

- Role play to identify processes and activities
- Build business process model

HIPPO W2	UML Requirements Workshop
	Paper Exercises 1 hour

- Create use case model
- Planning session
- Capture requirements details
- Map non-functional requirements to use cases

HIPPO W3	UML Analysis Workshop
	Paper Exercises 1 hour

- Model use case logic as an activity diagram
- Construct domain model

HIPPO W4	UML Design Workshop
	Paper Exercises 1 hour

- Explore object interactions
- Model complex state behaviour