

## Modeling Fundamentals with Sparx EA

**Course Number:** MOD-100

**Format:** Instructor Led, Classroom or Virtual

**Standard Duration:** 21 hours, can be extended/tailored to 28 or 35 hours.

### Overview

This course prepares students for learning modeling techniques by introducing foundational concepts that underpin all modern modeling techniques and notations. The fundamentals of working with Sparx EA are also introduced along with core understanding of stereotypes, UML profiles, frequently used UML relationships and modeling objects, traceability, and model management principles. This course can be extended and tailored for additional costs to 28 hours to include additional modeling topics and Sparx EA skills.

### Learning Outcomes

- Use basic features of Sparx EA.
- Understand and be able to use basic UML notation.
- Learn Core UML Diagram Types with Sparx EA: Use case, class, activity, sequence, and component.
- Be able to explain what stereotypes are in UML.
- Understand the theory and practice of instantiation in Sparx EA.
- Understand and explore traceability features of Sparx EA.
- Become aware of useful intermediate and advance features of Sparx EA.

## Course Content: Detailed Outline and Timing Approximation

### Day 1 Outline

Timing	Topic	Exercise
30m	Introductions / Objectives	
30m	1. UML, Archimate, and Modeling In General	
15m	< Break >	
60m	2. Essential Modeling and UML Constructs	
60m	Lunch	
40m	3. Tool Primer: Sparx EA Essentials	
40m	4. Exercise: Understanding Stereotypes	
15m	< Break >	
60m	5. Essential Building Blocks in UML	



## Day 2 Outline

Timing	Topic	Exercise
20m	Recap & Q/A Session	
45m	1. Understanding Instantiation using Components	
15m	< Break >	
20m	2. Tagged Values: Adding our own stuff to UML	
60m	3. Understanding Traceability	
60m	Lunch	
60m	4. Traceability in Sparx EA	
15m	< Break >	
30m	5. Publishing and Sharing Models	
45m	6. More Tooling Essentials: Managing Model Content Efficiently	

## Day 3 Outline

Timing	Topic	Exercise
30m	Recap & Q/A Session	
60m	1. Modeling Processes in UML: Notation Essentials	
15m	< Break >	
60m	2. Describing Architecture with Basic UML	
60m	Lunch	
60m	3. Recapping Core UML Diagrams in Sparx EA	
15m	< Break >	
60m	4. Use Case Realization Technique: Connecting Architecture and Functional Requirements	