

## Introduction to Modeling with SysML

**Length:** 2 Days

**Summary:** The Systems Modeling Language (SysML) is a modeling language designed for systems engineering and based on the UML. This two day course begins with an introduction to general modeling concepts that feeds into a gentle introduction to the background of SysML and its relation to the UML. The key concepts of structural and behavioral modeling are covered in some detail through interactive, example-led sessions that complete the first half of day one. The second half of day one introduces each of the 9 SysML diagrams and 3 cross-cutting notations, along with some examples of how they may be used in real-life situations.

### Course Objectives

- To provide an awareness of the principles and concepts inherent in Modeling
- To describe the structure and content of SysML
- To enable attendees to appreciate SysML modeling techniques
- To give attendees experience in modeling with SysML

### Attendees Will Learn

- Principles of structural and behavioral modeling
- Essential SysML concepts, terminology and notation
- The purpose and use of all SysML diagrams
- How SysML diagrams are organized and the relationships between diagram

**Pre-requisites:** An understanding of systems engineering principles and concerns

**Who Should Attend:** This course is ideal for anyone who wishes to learn about the System Modeling Language, whether because they are to use the SysML or because they need to be able to understand system models producing using the SysML, and who wish to gain experience in SysML modeling

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## COURSE CONTENT

### DAY 1

- Modeling
- The History of SysML
- Structural Modeling
- Behavioral Modeling
- The SysML Diagrams
- Structural Diagrams
- Behavioral Diagrams
- Cross-cutting concepts

### DAY 2

- Physical systems, interfaces & constraints
- Workshop