

SysML in Practice

Model-based Systems Engineering (**MBSE**) offers significant opportunities for improving productivity and quality. This intermediate training will enable you to discover the ins and outs of the **SysML** modeling language. We will also focus on the need to define a modeling approach, adapted to the context of the company and the type of system to be studied.

Through a guided case study, starting from use case and requirements diagrams, you will discover the block diagrams for structural modeling of complex systems. You will then deepen the sequence diagram, the state diagram and activity diagram for dynamic modeling. You will also learn to use specific SysML diagrams, such as the requirements diagram and the parametric diagram, as well as the important concept of allocation.

Duration: 2 days (4 sessions of 3.5h)

Audience:

Project managers, architects, system engineers,
wishing to discover Model Based Systems Engineering
with SysML

Prerequisite: Experience in Systems Engineering

Teaching Method:

Theoretical presentation with examples
Group brainstorming on a case study
SysML tools demonstrations



**SysML in Action with
Cameo Systems Modeler**

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Pedagogical Program

Introduction

What is a Model?
MBSE
SysML Objectives and Origins
SysML Diagrams
Proposed Approach

Requirement Modeling

Use Case Diagram
Sequence Diagram
Requirement Diagram
Case study #1

Structural Modeling

Block Definition Diagram
Internal Block Diagram
Package Diagram
Case study #2

Dynamic Modeling

State Diagram
Activity Diagram
Model Animation
Case study #3

Transverse Modeling

Parametric Diagram
Allocation Concept
Requirement Diagram and
Traceability
Case study #4

Conclusion

MBSE Benefits
SysML Tools

