

## **MBSE based on SYSMOD and Enterprise Architect**

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**Duration: 3 Days**

INCOSE sees model-based systems engineering (MBSE) as a key technology for successful systems development, and has the vision to establish it as the standard in systems engineering by 2025. SYSMOD sees itself as a "toolbox for pragmatic, model-based systems development. "It can be implemented with SysML, but it doesn't have to be." Specifically, it consists of methods, roles and deliverables. Using the end-to-end modeling methodology SYSMOD (Systems Modeling Toolbox), the training takes you from system idea to requirements and analysis to system architecture.

For Enterprise Architect there is a SysMod extension which can be requested here [https://www.lieberlieber.com/divi\\_overlay/use-cases-download/](https://www.lieberlieber.com/divi_overlay/use-cases-download/)

### **Prerequisites:**

Basic understanding of CASE tools and how they work is helpful.

### **Target group:**

- *Teams that are new to MBSE* and do not yet have methodological guidelines can use existing approaches as a guide and try them out in their project in an adapted way.
- *Teams that are reorienting towards MBSE* can take away many good ideas from SYSMOD on how a more model-based development could look like.
- *Teams that are already successfully using MBSE* can reach a higher level of maturity with SYSMOD.

### **Content**

- Introduction to SysML/UML, MBSE
- Presentation of the SYSMOD Toolbox
- Introduction to Enterprise Architect
- Requirements Analysis and the SYSMOD Zigzag Pattern
- Analysis and modeling of system context and system use cases
- Describing system processes with flowcharts
- Model system structure and interfaces / interaction points
- Model interaction between structural elements
- Traceability, Relationship Matrix
- Introduction to UML profiles and creation of MDGs for own extensions
- Team collaboration, versioning
- Generating project documentation (HTML, PDF or DOCX)
- Illustration of all topics with practical examples on a continuous project based on the SYSMOD process.