memIQ
Progress by Education

Systems Modeling Language

Level: intermediate

Length: 21 – 35 hours, depending on the practical part

Course objective: learn to use SysML in software development

What You Will Learn

- Learn the role of SysML, how it is used
- Introduces the diagram types in order to express a software construct or behavior

Who Can Attend: programmers who want to apply SysML during software development

Prerequisites: because SysML is an UML profile, it helps a prior knowledge of UML as well as the knowledge at least at a medium level of a particular object oriented programming language like C++, Java, C#, Python, etc.

Required Facilities: VGA projector, white board, workstation, development tools for writing programs in an object oriented language (Java, C++, C#, etc.)

Related Courses: UML, Design Patterns, Object Oriented Programming, object oriented programming languages (C++, Java, C#)

Description

The course offers a theoretical and practical approach of SysML towards its usage in constructing software constructs. The examples, case studies, hands on assignments offer a good understanding of SysML diagrams. There are performed the following activities:

- Presentation of the main graphical elements, diagram types, their semantics and how they are used
- Understanding, „reading" the SysML diagrams which were built by others
- Building of diagrams in order to express structures (static aspects) or behaviors (dynamic aspects)
- Implementation of SysML diagrams („translation") in one object oriented language (C++, Java, C#) in order to emphasize variants and particularities related to that language
- Using of SysML for modeling during software development, at requirements specifications, object oriented analysis (OOA) & object oriented design (OOD)

The course is not based on any particular modeling tool or any editing tool of the SysML diagrams.

Contents: