The Instructors

John FAVARO has more than twenty years of experience in the information technology field. After spending several years at CIT-Alcatel in Paris and Siemens AG in Germany, he joined Intecs where he has been the leader of different projects to develop UML-based methods and tools. He now coordinates R&D activities at Intecs and is on the steering committee for the International Conference in Software Reuse. Mr. Favaro took his degrees in computer science at Yale University and the University of California at Berkeley.

Silvia MAZZINI has more than twenty years of experience in the Software Engineering field. She is involved both in technical and management activities in the context of several international industrial and research projects. She is Methodologies and R&D Manager at Intecs. Mrs. Mazzini took his degree in computer science at Pisa University in Italy.

The Company

Since 1974, INTECS has been operating at the forefront of the software market, where safety, reliability, innovation, and quality are essential ingredients for success. INTECS provides leading-edge software technologies to support the major European and Italian organisations in the design and implementation of advanced electronic systems for Defence, Space, and Civilian markets.

Intecs is ISO-9000 certified since 1994. Currently it holds **ISO 9001:2008** quality certification for software development in Defense, Space, and Civilian domains. Moreover, Intecs Defence and ATC Divisions were positively appraised at **CMMI® Maturity Level 3**.

General Information

Location

Courses may be arranged in-house at the customer site upon request.

Contact

Silvia Mazzini
Intecs SpA
Via u. Forti, 5
Montacchiello (Pisa)
I-56121, Italy
Phone +39 050 9657513
Fax +39 050 9657400
Email: silvia.mazzini@intecs.it
http://www.intecs.it/

Mastering the SysML Language

A two-day intensive course

The System Modeling Language

The OMG Systems Modeling Language (SysML) is a general-purpose graphical modeling language for systems engineering applications. It supports the specification, analysis, design, verification and validation of a broad range of complex systems and systems-of-systems, which may include hardware, software, data, personnel, procedures, and facilities.

In 2003 the INCOSE and OMG organizations expressed the needs for a robust "standard" modeling language for systems engineering to support a formal, consistent and effective communication of system requirements, analyses and designs among systems engineers and the other engineering disciplines, and therefore enable a significant enhancement of the quality, productivity and effectiveness of the systems engineering processes. This initiative led to the INCOSE and OMG adoption of the SysML standard in 2006.

SysML is defined as an extension of a subset of the Unified Modeling Language (UML) using UML's profile mechanism.

1. Structure   2. Behavior

definition   use   interaction state machine activity/function

3. Requirements   4. Parametrics

The Course

A comprehensive one-day introduction to Model Based System Engineering all of the major features of the SysML, together with examples in which the participants can deepen their understanding of the concepts. Special emphasis is placed on the use of the notation in the context of model based approach to system engineering.

Intended audience

System engineers from industry and large organizations who need quickly to gain familiarity with the SysML and begin using it in their daily work.

Prerequisites

The participants are expected to be familiar with the fundamental concepts of system engineering and UML other than the most basic familiarity with system life cycle.

Benefits

The course will primarily familiarize the attendees with the specific approach and terminology found in the SysML as well as the structure and nature of the inter-relationship between system processes. Moreover they will understand the most important of system engineering activities.

Methods and Media

Classroom presentations with Power Point slides.

Material

The participants are provided with copy of the course handouts

Course Outline

Day 1

Systems Engineering introduction

Break

A Model Based Approach to System Engineering

Lunch Break

SysML introduction

Break

Modeling requirements with SysML

Day 2

Modeling Blocks

Break

Modeling Constraints with SysML Parametrics

Modeling Activities with SysML

Lunch Break

Modeling Cross-cutting Relationships with SysML Allocations

Break

MBSE Methodology with SysML