

The Teachers

Cinzia Agosta has about 13 years of experience in software development and over 3 years of experience in AUTOSAR projects. She supported several customers to approach the AUTOSAR world for the first time and develop a complete AUTOSAR project.

Francesco Tamberi is an embedded software engineer, with several years of experience in the automotive, railway and telecommunication fields. He has about 4 years of experience in modelling, configuration and developing of complex AUTOSAR projects.

The Company

Since 1974, INTECS has been operating at the forefront of the software market, where safety, reliability, innovation, and quality are essential 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. Intecs is **SEI Partner**. Moreover its Defence and ATC Divisions were certified **CMMI® Maturity Level 3**.



General Information

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

Contact

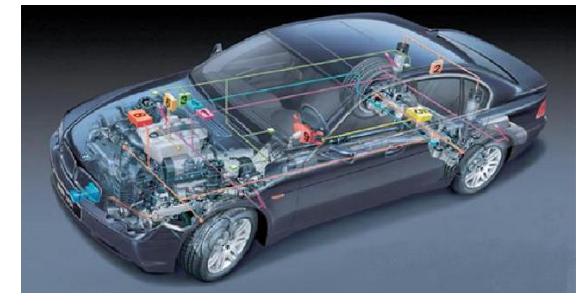
Silvia Mazzini
Intecs SpA
Via U. Forti, 5
Montacchiello
I-56121 Pisa, Italy
Phone +39 050 9657513
Fax +39 050 9657400
Email: silvia.mazzini@intecs.it
<http://www.intecs.it/>



AUTOSAR

Practical step-by-step training

A three-days intensive course



The AUTOSAR Standard

The AUTOSAR (AUTomotive Open System ARchitecture) consortium was established in 2003.

AUTOSAR is made of automobile manufacturers, suppliers and tool developers for jointly defining an open automotive software architecture that is de facto an industry standard.

The main technical needs, which moved all the partners, are summarized in:

- Management of increased ECU complexity, also in terms of required functions
- Errors detection in early phases of the design process
- Simplification for product modification
- Enforcement the scalability of software solutions
- Improve ECU quality and reliability

The AUTOSAR consortium approach is: cooperate on standard, compete on implementation.

The Course

INTECS offers a three days training on AUTOSAR to its customers, but with a revolutionary approach: no more boring presentations on mere theoretical concepts but a real simple project developed from scratch side by side with the customer, using market available AUTOSAR tools and a sample hardware board.

Two INTECS teachers will lead the customer through each step of the AUTOSAR project, from the software architecture design to the application development, basic software configuration, code and RTE generation, build and generation of an executable to be loaded to the hardware board

Intended audience

Software Engineers (Development and Verification), Quality Engineers, Configuration Managers, Test Engineers, and Project Managers.

Course Outline

Day 1

Introduction to the AUTOSAR Approach

What is AUTOSAR? Objectives and philosophy
Layered architecture
Advantages of the AUTOSAR architecture

The AUTOSAR Methodology

The complete workflow of an AUTOSAR project

The VFB Specification

Ports and Interfaces
Communication Patterns
Runnable Entities, Runnables versus Tasking
The task mapping

AUTOSAR Software Components

Ports, connectors
Sensors and Actuators
Service Components, Compositions

Generation of RTE

The Contract phase and the generation phase
Implementation: the generated files

Practice:

Creation and setting-up of a simple AUTOSAR project from scratch

Day 2

The mode management

Error handling, reporting and diagnostic

Practice

Modeling the AUTOSAR Software components
Configuration of the Basic Software
Build and generation of the executable
Load to the board and test it

Course Outline

Day 3

The AUTOSAR Communication stack

The Topology of an AUTOSAR project

Data mapping

Measurement and calibration

Practice:

Add the communication stack to the project
Build and generation of the executable
Load to the board and test it