

Basic Principles of Testing for Embedded Systems



Training Description

Participants will learn about the requirements, methods and tools used for testing embedded systems and will be able to develop and implement structured testing strategies for their own projects after completing the seminar.

You will be provided with answers to the following questions.

- Why do embedded systems frequently only undergo insufficient testing or are tested very late in the process?
- What makes it so difficult to test embedded software?
- How can the „Test First“ principle also be applied to embedded systems?

Participants will learn about the different test stages and methods as well as which requirements they can meet using these in their tests. The seminar will mainly focus on methods that are particularly suited for testing embedded systems.

Participants will apply and expand on their knowledge with the help of a universal and practical example.

Target Group

Software architects, software developers, software project managers and system architects

Prerequisites

Knowledge of the development of embedded systems or software.

Training Content

- Basic principles and objectives of testing
- Embedded systems – why are they tested differently?
- The testability of requirements
- Architectures and testability
- Test stages: component, integration, system and acceptance testing
- Static testing methods
- Dynamic testing methods
- In-the-loop testing (MIL SIL PIL HIL)

- Safety and standards
- Test processes – traditional and agile
- Continuous Integration
- Test tools

Method and Training Materials

Presentation and hands-on exercises

The training materials will be provided to each participant.

Duration

3 days

Training Fee

1.790 Euro plus VAT tax per person

The fee includes the training certificate, the training material, snacks, beverages and lunch in a nearby restaurant.

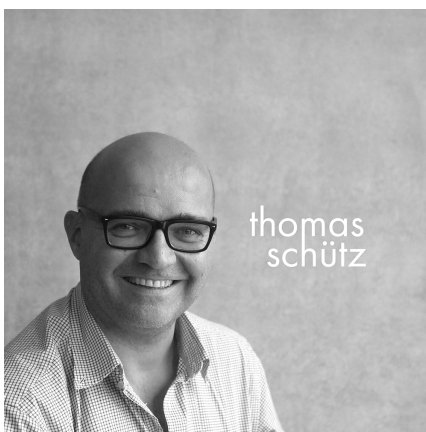
Number of Participants

6 to 12 participants

Location

Technologiezentrum TechBase, Franz-Mayer-Straße 1, D-93053 Regensburg

Referent



Thomas Schütz

holds a degree in aerospace engineering of the University of Munich and is CEO and consultant of Protos Software, which he founded in 1997. He served as project lead or architect in many projects with the focus on model-based development for Embedded Systems. He also is project lead of the Eclipse Project eTrice.

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