

# Software Architecture for Embedded Systems



## Training Description

Participants will learn about the tasks carried out by software architects as well as the tools and methods that they use. Using architecture principles as a basis, participants will learn the key architecture methods for embedded systems and how to apply these in projects. After completing the seminar, participants will be able to develop and document structured software architectures.

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, system architects

## Prerequisites

Software development knowledge is necessary. Experience with ROOM or UML is helpful.

## Training Content

### Software Architecture Basics (1st day)

- What is software architecture?
- The role of architects and the interfaces they use
- Software architecture requirements
- UML for documenting software architectures
- Designing software architectures
- Architecture patterns for embedded systems
- The tools used by software architects

## Embedded Software Architecture (2nd day)

- Architecture patterns for embedded software
- Communication and implementation models
- Description of structures and properties
- Component-based development
- Abstraction and automation with model-based software development
- Demonstration of tools for model-based software development

## Method and Training Materials

Presentation and hands-on exercises

The training materials will be provided to each participant.

## Duration

2 days

## Training Fee

1.290 Euro plus VAT tax per person

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

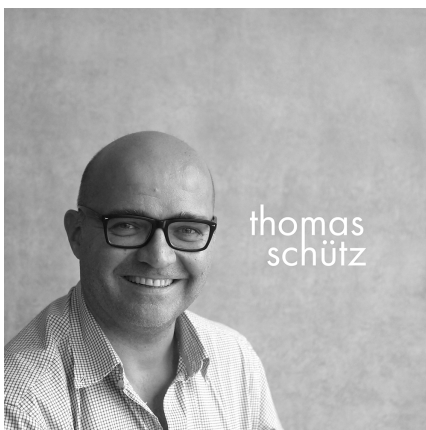
## Number of Participants

6 to 12 participants

## Location

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

## Trainer



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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