



# Online training format

### **Pre-training**

Installation of SW environment (EB provides setup and installation instructions)

#### **Training schedule and structure**

Schedule for 3 days

Lecture part: 9 a.m.- 3:30 p.m. incl. 1-hour lunch break

Homework:
Approximately 1.5
hours per day

Schedule for 5 days

Lecture part: 9 a.m. – 12:30 p.m.

Homework:
Approximately 1 hour
per day

### **Lecture part**

- Theory lectures according to the agenda
- Demonstration of exercises

### **Homework (Exercises)**

- Self-paced repetition of all exercises
- Trainers available on standby to provide support

### **Post-training**

- Selected topics provided as training videos
- Access to recorded exercise demonstrations.



## Training Topics

- Introduction & Concepts
  - Motivation for AUTOSAR
  - Major AUTOSAR objectives
  - AUTOSAR organization and evolution
  - AUTOSAR Concepts
- Architecture
  - Layered Software Architecture and Basic software (BSW) Modules
- Methodology
  - AUTOSAR's Configuration Concept
  - System- and ECU-Configuration
- EB tresos Studio
- Operating system

### SWC Layer & RTE

- SWC Description
- Interfaces
- The runtime environment (RTE)
- RTE events & mapping
- Advanced concepts of SWCs

#### Diagnostics

- Development Error Tracer
- Diagnostic Event Manager
- Function Inhibition Manager
- Diagnostic Communication Manager

### Communication stack

- Overview
- Bus independent modules (Com, PduR, IpduM)
- Bus specific sub-stacks (Can, FlexRay, IP/Ethernet)

Chapter with corresponding Exercise

- Mode management
  - ECU State- and BSW Mode- Manager
  - Watchdog Management
  - COM Manager
  - Network Management
- Memory stack
  - NVRAM Manager
  - Memory abstraction Interface
  - Flash / Eeprom stack
- IO HW Abstraction
  - Dio Example



### Post-training and Exercise videos

- Exercises are explained in a series of videos (1 video for each exercise step): <a href="https://files.elektrobit.com/index.php/s/bQjHM9QRXN9BBsR">https://files.elektrobit.com/index.php/s/bQjHM9QRXN9BBsR</a>
- The following link provides access to additional training videos on topics: <a href="https://files.elektrobit.com/s/7ARsbiPF74XTMc9">https://files.elektrobit.com/s/7ARsbiPF74XTMc9</a>
  - EB tresos Safety Modules
  - EB tresos Security Stack

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### Meet & Greet

- Present yourself and provide some insights to the following:
  - ➤ Where is your (Home-) Office?
  - ➤ What's your current / future role in respect to the training topics?
  - ➤ What are your expectations for this training?
  - > Do you have any prior experience with AUTOSAR and/or EB tresos Studio



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