

### What you'll learn

The EB tresos automotive Ethernet training targets all developers and integrators who are familiar with the AUTOSAR Classic Platform standard and EB tresos in general, and who would like to expand their knowledge about the Ethernet communication bus in the automotive domain.

Learn the related IP protocols and how Ethernet is embedded into the AUTOSAR layered software architecture. A sequence of hands-on exercises will complement the learning experience, as you build and run an AUTOSAR application that communicates via Ethernet on the Windows platform.

### Why should you take this course?

- Learn or refresh all relevant protocols used for Ethernet communication
- Improve your understanding of the integration of Ethernet communication into the AUTOSAR layered software architecture
- Remain up-to-date with the paradigm change from signal-based to service-based communication
- Access hands-on exercises using EB tresos AutoCore (Classic AUTOSAR basic software)

### Course content

- Ethernet and IP basics
  - Physical layer
  - Protocols
- Testing and scripting
- AUTOSAR IP/Ethernet stack architecture and module overview
- AUTOSAR IP/Ethernet stack details and optimization
- Service-based communication using SOME/IP with service discovery

### How will this course be delivered?

**Delivery format:**  Classroom  Virtual classroom  Blended learning

**Target group:**  Developers  Architects  Integrators  Testers  Managers

**Duration:** Classroom: 2 days  
Virtual classroom: 2 days or 4 half days

**Language:** Trainer: English  
Training material: English



Elektrobit

# Training description

## EB tresos automotive Ethernet training

**Limitations:**

The maximum **number of participants** for a class is limited to 12.

### Prerequisites

- General knowledge about software development for automotive systems
- General knowledge of the AUTOSAR Classic Platform standard and EB tresos in general
- General programming skills in C

### Resources

- Training presentation slides (PDF)
- Access to a virtual desktop for practical exercises for the duration of the training

### Your learning path

Training name	Overlapping content and order (in days)	Goals/target audience	Target group
AUTOSAR basic training	1 d	Basic concepts of both AUTOSAR Classic Platform and Adaptive Platform	(Project) Managers
EB tresos Classic AUTOSAR training	3 d	High-level coverage of Classic AUTOSAR, includes basic concepts and EB tresos Studio workflow	Developers/ Integrators/ Architects
EB tresos Studio workflow training	1 d	EB tresos Studio training for those already familiar with Classic AUTOSAR	Developers/ Integrators
EB tresos Studio extension training	1 d	Possible extension for developing your own extensions to EB tresos Studio	Developers
EB tresos automotive Ethernet training	2 d	Possible extension for details of the Ethernet communication stack	Developers/ Integrators/ Architects