VECTOR >

Certified Embedded Professional Basic Software Integration

Agenda VectorAcademy

Delivery Format:	The certification program includes E-Learning content with integrated step-by-step configurations and exercises as well as remote sessions. It concludes with a final exam (theoretical & practical).
Duration:	17 weeks (~10 hours per week)
Target Group:	Project leaders, AUTOSAR ECU developers and integrators
Prerequisites:	Participation in Certified Embedded Associate AUTOSAR Classic or solid software development knowledge in AUTOSAR
Goal:	Acquire expert knowledge in the field of MICROSAR (Vector Basic Software, DaVinci tools); Award of the certificate "Certified Embedded Professional"

1. Infrastructure

- Introduction to the Vector BSW-Package
- Fundamental use of the DaVinci Tools

2. Basics

- Understanding the Basic Software Modules Os, EcuM, BswM, Mcu and EcuC
- Setting up a completely new Configuration
- Start-up of the System
- Verification of the Configuration

3. Communication

- Set up of the CAN Communication Cluster with Can and CanIf
- Transmission Process and Receiving Process
- PDU Concept and PDU Routing with PduR
- Software Component Signal Access

4. Memory

- Set up of the Memory Stack
- Memory Technologies and Modules Fls, Fee, Ea and Eep
- Configuration of nonvolatile Memory Blocks with NvM
- Debugging of Memory Stack

5. Diagnostic

- Set up of Diagnostic Modules Dcm and Dem
- Diagnostic Protocols
- Diagnostic Communication
- Debugging and Testing

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6. Mode Management

- Deep Understanding of ECU and Network Modes
- ECU Start-up and Shut-down Phases with EcuM
- Concept of Mode Handling with BswM
- Communication Mode Handling with ComM
- Debugging of Mode Managers

7. Vector

- Communication Channels to Vector

Schedule:

