VECTOR >

Certified Embedded Professional Software Update

Agenda VectorAcademy

Delivery Format:	The certification 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:	13 weeks (~10 h per week) Please make sure you have enough time to self-study between the remote sessions.
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 Software Update in Vector MICROSAR Classic and Vector FBL solutions

1. **Infrastructure**
   - Basics about the Vector FBL Delivery Package
   - Fundamental use of vFlash

2. **Software Download in Application Context**
   - Different Approaches of Software Update
   - Memory Partitioning and Activation Concepts
   - Software Architecture
   - Overview of the Update Round-Trip

3. **Software Download in Bootloader Context: Introduction and Memory Layout**
   - System Overview of a Bootloader
   - Memory Layout and Memory Partitions
   - Flash Driver

4. **Software Download in Bootloader Context: Basic Functionality and Procedure**
   - FBL Architecture and Runtime behavior
   - Boot Manager
   - Block Validation
   - Security Features
   - Download Sequence

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5. **Software Download in Bootloader Context: Additional Features**
   - FBL related features: Encryption, Compression, Pipelined Programming and Verification, Bootloader Updater and Exercises for these topics
   - Secure Boot
   - HSM Updater
   - Multi-Node Update

6. **Vector**
   - Communication Channels to Vector

Schedule:

