VECTOR >

Certified Testing Associate

Agenda VectorAcademy

Delivery Format: This course is offered in a blended learning format.
Duration: 4 weeks (approx. 32 hours of self-study + 8 hours of remote sessions)
Target Group: Test Engineer, Project Manager
Prerequisites: None
Goal: Acquire knowledge of the Vector testing ecosystem and the underlying concepts

1. **Basic Understanding of Embedded Testing**
   - Overview of embedded testing principles
   - Test levels in embedded systems
   - Introduction to SIL and HIL

2. **Vector Testing Ecosystem Overview**
   - Tools and hardware of the Vector testing ecosystem
   - CANoe as open environment
   - Testing tools in DevOps environment

3. **Vector CANoe – Basic Functions**
   - CANoe concepts: Analysis, simulation and testing
   - Configuration setup

4. **Introduction to CAPL Programming**
   - Application areas
   - Structure of CAPL programs
   - Writing simple tests

5. **Test Design with vTESTstudio and VS Code**
   - Test design with vTESTstudio
   - Programmatic test design using VS Code with Vector extensions
   - Executing test units in CANoe
   - Test reporting and documentation

6. **SIL Testing (Software-in-the-Loop)**
   - SIL testing fundamentals
   - vVIRTUALtarget, SIL Kit and SIL Adapter
   - Virtual ECUs in simulation environments

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7. **DevOps with CANoe Server Edition**
   - Use cases for CANoe Server Edition
   - Automation with CANoe SE and VS Code
   - CI/CT integration of SIL and HIL testing

8. **Network Interfaces**
   - Network interface types and form factors
   - Installation and configuration in CANoe

9. **Test Hardware - VT System and VIO System**
   - HIL system hardware overview and use cases
   - Configuration in CANoe
   - HIL system operation

10. **HIL Testing with Vector Tool Platform Devices**
    - CANoe operational modes and related use cases
    - Vector Tool Platform Devices and their configuration

Schedule:

