

# CANoe for CAN

## Agenda VectorAcademy

<b>Delivery Format:</b>	This Course is offered in Classroom Format at Vector
<b>Duration:</b>	5 days
<b>Target Group:</b>	CANoe Users (controller development, motor vehicle electrical, test planning and execution)
<b>Prerequisites:</b>	None
<b>Goal:</b>	To learn about the properties of the CAN and CAN FD protocol, to gain knowledge of CANoe's areas of application and to measure, analyze, model and simulate with CANoe and CAPL. Work on real ECUs and multibus systems.

### 1. CAN Fundamentals

- > Motivation
- > Physical Layer
- > Bus access methods
- > Characteristics of the CAN Protocol
- > Error Treatment
- > CAN FD
- > CAN Network Description

### 2. Measurement and Analysis

- > Start-up of CANoe for CAN
- > Measurement and Analysis
- > Data Logging and Offline Analysis
- > Diagnostics
- > Send Options
- > Panels
- > In-depth modules

### 3. Simulation and CAPL Programming

- > Introduction to Simulation and Modeling
- > Introduction to CAPL
- > Signal-oriented CAPL
- > Message-oriented CAPL
- > Test Modules

### 4. CANoe in Practice

- > Measuring Bus Communication of Automotive ECUs
- > Introduction to OSEK/VDX Network Management
- > Analysis of Multiple Networked CAN Bus Systems
- > Extensive Data Logging and its Evaluation (Offline Analysis)
- > Creating Bus Simulations and Startup on the Breadboard Setup