

# ECU Tests with the VT System and CANoe

## Agenda VectorAcademy

<b>Delivery Format:</b>	This Course is offered in Classroom <b>or</b> Remote Format
<b>Duration:</b>	Classroom: 2 days Remote: 14 hours
<b>Target Group:</b>	CANoe users in the test field, VT System users
<b>Prerequisites:</b>	CANoe experience, CAPL or vTESTstudio basic It is helpful to do the CAPL Basics E-Learning. You will receive the link to the CAPL E-Learning prior to the course start.
<b>Goal:</b>	Deep understanding of VT System capabilities and application areas, planning and construction of a VT System, CANoe configuration and manual operation, constraints to protect your hardware. Emphasis is put on automatic tests to use the VT System efficiently.

### 1. VT System Introduction

- > Motivation
- > Use cases
- > Integration in CANoe

### 2. Setup

- > Power supply concepts, VT7001 and VTC8920, ground connections
- > Communication scenarios (VT System - CANoe)
- > Processor modules (VT60x0)
- > Communication modules (VT6x04)
- > Start states, constraints, manual operation
- > Firmware update, calibration, stand-alone mode

### 3. Measurement and Testing

- > Repetition for CAPL respective vTESTstudio
- > Own libraries for efficient tests
- > VT1004 load module – concepts and features
- > Automatic tests for ECU outputs
- > Bus bar applications
- > VT2004 stimulation module - concepts and features
- > Automatic tests for sensor inputs
- > waveform generation

### 4. Other VT Modules

- > Use cases
- > Block diagrams and features