



# Agenda VectorAcademy

## CANAPE WORKSHOP

<b>Duration:</b>	2 Days
<b>Target Group:</b>	Controller developers, calibration engineers
<b>Prerequisites:</b>	None
<b>Goal:</b>	Acquire general understanding of sequential flow of the CCP/XCP protocol, Fundamentals of measurement data acquisition in CANape

### 1 | INTRODUCTION TO FUNDAMENTALS OF THE CCP/XCP PROTOCOL | 1.0 H

- ▶ Topology
- ▶ Communication Forms
- ▶ Layout of a XCP frame

### 2 | MODELS FOR SYNCHRONOUS DATA TRANSFER IN CCP/XCP | 2.5 H

- ▶ Static and dynamic DAQ lists
- ▶ Organization of the ODT - Lists, cold start measurement
- ▶ Acquisition of measurement data with time stamp

### 3 | MODELS FOR CALIBRATION IN CCP/XCP | 0.5 H

- ▶ Partitioning memory into segments and pages
- ▶ Freeze mechanism
- ▶ Memory page
- ▶ Swapping

### 4 | INTRODUCTION TO CANAPE | 1.0 H

- ▶ System overview
- ▶ Integrating additional measurement hardware

### 5 | APPLICATION CONCEPT IN CANAPE | 0.5 H

- ▶ Controller memory allocation
- ▶ Mirror memory
- ▶ Flash programming
- ▶ Application procedure



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## 6 | CREATING A NEW PROJECT IN CANAPE | 1.0 H

- ▶ Adding a new controller to the device list
- ▶ Configuring the driver
- ▶ Exercises

## 7 | MEASUREMENT IN CANAPE | 2.5 H

- ▶ Data acquisition modes
- ▶ Discussion of the Display windows
- ▶ Exercises

## 8 | CALIBRATION IN CANAPE | 1.5 H

- ▶ Online / Offline calibration
- ▶ Discussion of the Calibration windows
- ▶ Exercises

## 9 | OFFLINE EVALUATION IN CANAPE | 1.5 H

- ▶ Measurement cursor, difference cursor, global cursor
- ▶ Analysis of MDF files
- ▶ Insert virtual file channel
- ▶ Exercises

## 10 | DATA MANAGEMENT IN CANAPE | 1.0 H

- ▶ Loading, saving and comparing parameter set files

## 11 | FUNCTIONS AND SCRIPTS IN CANAPE | 0.5 H

- ▶ Allocating and compiling of functions
- ▶ Instantiating functions

## 12 | QUESTIONS, FEEDBACK, SUGGESTIONS | 0.5 H