

# DYNA4 Fundamentals

Agenda VectorAcademy

<b>Delivery Format:</b>	This Course is offered in Classroom Format
<b>Duration:</b>	2 Days
<b>Target Group:</b>	Application Engineers in the field of model-based vehicle and environment simulation (vehicle dynamics, ADAS, HEV, BEV, Engine ECU function development and test)
<b>Prerequisites:</b>	None
<b>Goal:</b>	Efficient use of the software, capability to realize the steps to prepare and run a simulation: Manage all data that define a simulation project, parameterize the vehicle model, define test scenarios, run simulations, analyze and visualize simulation results

## 1. DYNA4 Architecture

- > Modular Implementation in Simulink
- > Component models in different levels of detail
- > Extendability by the user

## 2. Definition of vehicle model parameters

- > Model data structure
- > Using GUI functions for data editing and data management

## 3. Definition of test scenarios

- > Result data selection
- > Environment definition
- > Vehicle control

## 4. Execution of Simulations

- > Execution of single scenarios
- > Automated simulation runs

## 5. Visualization and analysis of simulation results with DYNAanimation and Plot GUI

- > DYNAanimation
- > Plot GUI