DYNA4 Fundamentals

Agenda VectorAcademy

Delivery Format:	This Course is offered in Classroom Format
Duration:	2 Days
Target Group:	Application Engineers in the field of model-based vehicle and environment simulation (vehicle dynamics, ADAS, HEV, BEV, Engine ECU function development and test)
Prerequisites:	none
Goal:	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