DYNA4 Simulation Model – Background of the Vehicle Model incl. ADAS-Sensors

Agenda VectorAcademy

Delivery Format:	This Course is offered in Classroom Format
Duration:	2 Days
Target Group:	Application engineers and developers in the field of model-based vehicle and environment simulation with the focus on vehicle dynamics, (sensor based) driver assistance in a traffic environment and driving performance and consumption.
Prerequisites:	DYNA4 Fundamentals, basic understanding of vehicle dynamics/driver assistance
Goal:	Understand the model approaches of the relevant components of the DYNA4 simulation model for vehicle dynamics, ADAS as well as driving performance and consumption (modular drivetrain model and electric system), Knowledge of the corresponding model parameters

1. **Introduction of the simulation model**
   - Modular architecture in Simulink
   - Component model features according to application area

2. **Introduction of the component model approaches**
   - Chassis
   - Control Units (ACC, AEB, Sensors, HCU)
   - Drivetrain
   - Electric System
   - Speed Control and Course Control
   - Tires
   - Traffic
   - ADAS sensors