

Modeling Driveline Systems with Simscape

OEM: MathWorks • Duration: 1 Day (8 hrs) • Code: MW-MODELING-DRIVELINE-SYSTEMS-WITH-SIMSC

COURSE MODULES & TOPICS

Day 1 of 1

Introduction to Vehicle Modeling

- Vehicle body modeling
- Friction, wind, and terrain effects
- Sensing physical quantities
- Dividing model and measurements

Braking Systems

- Simscape Driveline brake blocks
- Measuring wheel quantities
- Custom brake model

Transmission Mechanisms

- Actuating models with power sources
- Building driveline mechanisms
- Creating a multispeed transmission

Multidomain Drive and Control

- DC motor drive
- PWM actuation
- Closed-loop speed control