Mindluster Platform

# About the course MATLAB and Simulink Racing

Simulink is graphical and more interactive to the user. Whereas the Matlab is coding based approach based on the different function available in Matlab.

**Programming Category's Courses**

## Course Lesson(45)

Lesson 1 : **Vehicle Path Tracking Using Model Predictive Control**

Lesson 2 : **Vehicle Path Tracking Using Stanley Controller**

Lesson 3 : **Vehicle Path Tracking Using Pure Pursuit Controller**

Lesson 4 : **Simulating Longitudinal and Lateral Vehicle Dynamics**

Lesson 5 : **Modeling of a Continuously Variable Transmission CVT BAJA All Terrain Vehicle ATV**

Lesson 6 : **Vehicle Modeling Using Simscape Multibody**

Lesson 7 : **Vehicle Modeling Using Simscape**

Lesson 8 : **ECU Tuning and Data Logging Using CAN and Simulink**

Lesson 9 : **Programming ECUs Using Simulink**

Lesson 10 : **Vehicle Modeling Using Powertrain Blockset**

Lesson 11 : **Vehicle Modeling Using Simulink**

Lesson 12 : **TUfast Eco Team s Longitudinal Cruise Controller**

Lesson 13 : **Real Time Simulation and Testing of a Throttle Valve Controller**

Lesson 14 : **Design Optimization What s Behind It**

Lesson 15 : **Developing Algorithms for ADAS Systems with MATLAB and Simulink**

Lesson 16 : **Your Keys to Success Our Views**

Lesson 17 : **A MicroAutoBox Workflow**

Lesson 18 : **Steady State Lap Time Simulation**

Lesson 19 : **Modeling to Understand and Improve Your Brake System**

Lesson 20 : **Processing CFD Simulation Data**

Lesson 21 : **Simulink Tips and Tricks**

Lesson 22 : **Virtual Test Driving**

Lesson 23 : **Modeling Vehicle Dynamics**

Lesson 24 : **Basics of Code Generation**

Lesson 25 :
**Student Teams Use MATLAB and Simulink in the Formula Student Germany Racing Competition**

Lesson 26 : **Modeling Physical Components Part 2 Data Driven Concepts**

Lesson 27 : **Modeling Physical Components Part 1 Mathematical Models**

Lesson 28 : **From Model to Racing in Five Minutes**

Lesson 29 : **Principles of Control Design**

Lesson 30 : **CAN Communication with Your ECUs and the Vehicle Network Toolbox**

Lesson 31 : **Torque Vectoring Controller Design Tuning and Testing**

Lesson 32 : **Lap Time Simulation Essential Part of Concept Development**

Lesson 33 : **Developing a New Control Unit Using an FPGA**

Lesson 34 : **Driver in the Loop Simulations**

Lesson 35 : **MATLAB Tips and Tricks**

Lesson 36 : **Tire Modeling Extracting Results from a Large Data Set**

Lesson 37 : **Determining Chassis Stiffness with MATLAB**

Lesson 38 : **Battery Modeling with Simulink**

Lesson 39 : **From Telemetry Data to Suspension Modeling**

Lesson 40 : **Reduce Testing Time by Vehicle Modeling**

Lesson 41 : **Embedded Code Generation for Your Vehicle Control Systems**

Lesson 42 :
**Interview with Owen Carless Chief Judge FSG 2014 MATLAB and Simulink Racing Lounge**

Lesson 43 : **Import CAD Assembly into SimMechanics MATLAB and Simulink Racing Lounge**

Lesson 44 : **Data Acquisition and Analysis**

Lesson 45 : **Versioning Simulink Projects with Git**

# Related courses

**React Projects Workshops**

**Node js back end JavaScript**

**Python programming language**

**Social Network Theme UI With Sass**

**Full Stack React Django**

**Build a Node js App With Sequelize**

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