

Electronic design for electrical vehicle





Introducing



Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

- Advanced commands and actuators for electric vehicle powertrain

- Aechnologies and devices for electric vehicles

- Aevelop field oriented control for synchronous motor control

- Aropose and dimension electronic architecture for electromechanical actuator chains

- Analyze the failure modes of a motor driver and propose diagnosis and solutions to ensure safety

The student will be able to:

- Design and realize the command of electromechanical actuator (field oriented control for synchronous motor command).

- Design electronic architecture and embedded software for safe powertrain application, realized with real devices dedicated for automotive applications (microcontroller, smart power devices, sensors, system basis chip)

Practical info

Location(s)

