Spring 2017 EEE 598 Introduction to Electric and Autonomous Vehicles

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Course Objective

This course is designed to provide an introduction to the rapidly evolving field of electric and autonomous vehicles, and their impact to individual's daily life and society in general. The technologies and techniques involved in this field will be discussed, along with their impact to related policy and social infrastructure.

Course Outline

Electric Vehicles:

Introduction
Electric Motor
Power Semiconductor
Power electronics
Energy sources: Battery and Others

Autonomous Vehicles

System Architecture
Sensors
Actuators
Vehicle-to-Vehicle, Vehicle-to-Infrastructure Communications
Intelligence

Course Materials

There will be reference books, online materials, as well as literatures surveys.