

## **AIMS<sup>2</sup> Research Project in Electrical and Computing engineering**

**Research Duration:** Fall 2017 – Spring 2018

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**Contact No:** JD 3347, 818-677-3956, F 11-12 noon and S 12 to 1 PM or by appointment

**Title of Project:** Electric Speed Drives and Sustainability

### **Goals and Objectives of the Project, Expectations and Outcomes**

Students will learn the fundamentals of research in electrical engineering, this includes research in electric speed drives applied to electric vehicles and transportation in general. Sustainability will be a key factor in this research. We will expect students to learn to model the different electrical machines used in electric vehicles, analyze and model battery systems, simulate an electric speed drive using Matlab/Simulink, create a power point presentation and a poster as a minimum showing their findings. At the end of this experience, we will write a paper and present it at a conference.

### **Describe briefly what students can expect to learn by participating in this project.**

Students will learn Matlab/simulink, use laboratory equipment (oscilloscopes, multimeters, power supplies, etc) research skills, team work, communication skills, time management.