## **MECH 497 - Green Vehicle Technology Projects**

Instructors: Dr. Zuomin Dong or Dr. Curran Crawford

(Special Permission Needed)

## Logistics

- Equivalent to 2xMECH499 Technical Electives
- 1 or 2 Terms Duration during Any Terms
- Outcomes
- General background of Hybrid Electric Vehicles and EcoCAR2
- Technology Training from Industrial Sponsors
- Model Based Design Using Advanced Tools
- Design, analysis, prototyping and/or testing of vehicle subsystems or keycomponents
- Specific Project Examples
- Power electronics liquid cooling system design
- Rear suspension sub-frame upgrade
- Driver torque interpreter
- Traction control system
- Infotainment system development

Grading Policy		
Project Proposal	Problem Definition and Project Plan	15 %
Midterm Report	Technical Review and Feasibility Study	20 %
Project Assessment	Challenge/Complexity and Thoroughness of Work Completion	35 %
Project Presentation	Presentation Skills	5 %
Final Report	Documentation, Summary and Presentation	25 %









