

## **ECE 40600 - Senior Engineering Design II**

### **Type of Course**

Required for the CmpE and EE programs

### **Catalog Description**

Design II is an extension of Design I and includes but is not limited to (1) continued research, design, and implementation; (2) oral presentation and/or demonstration of the project to faculty and other interested parties; (3) answering appropriate questions related to the project; (4) generation of a final technical report documenting design, development, and performance of project.

### **Credits**

3

### **Contact Hours**

1

### **Prerequisite Courses**

ECE 40500

### **Textbook**

None

### **Course Objectives**

To develop capabilities of students to solve real-life problems. Students have to apply knowledge from their previous course work to accomplish projects formulation to prototype evaluation.

### **Course Outcomes**

#### **Students who successfully complete this course will have demonstrated**

1. The ability to identify the various parameters that need to be determined in order to evaluate the prototype with the basic design that was obtained in the first semester [2]
2. The ability to build, test and evaluate the basic design completed in the first semester [2]
3. The ability to function within a team [5]
4. The ability to present his/her work both written and orally [3]
5. Understanding of the ethical issues that are associated with the engineering profession [4]
6. Understanding of the societal impact of engineering [4]

7. The ability to obtain new knowledge necessary to design and test a system, component, or process to meet desired needs [7]

**Lecture Topics**

1. Societal impact of engineering
2. Engineering Ethics

**Coordinator**

Guoping Wang, Ph.D.

**Date**

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