

<b>Course</b>	ECE 40600 - Senior Engineering Design II
<b>Type of Course</b>	Required for the CmpE and EE programs
<b>Catalog Description</b>	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.
<b>Credits</b>	3
<b>Contact Hours</b>	1
<b>Prerequisite Courses</b>	ECE 40500
<b>Textbook</b>	None
<b>Course Objectives</b>	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.
<b>Course Outcomes</b>	Students who successfully complete this course will have demonstrated: <ol style="list-style-type: none"><li>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 <b>[2]</b></li><li>2. The ability to build, test and evaluate the basic design completed in the first semester <b>[2]</b></li><li>3. The ability to function within a team <b>[5]</b></li><li>4. The ability to present his/her work both written and orally <b>[3]</b></li><li>5. Understanding of the ethical issues that are associated with the engineering profession <b>[4]</b></li><li>6. Understanding of the societal impact of engineering <b>[4]</b></li><li>7. The ability to obtain new knowledge necessary to design and test a system, component, or process to meet desired needs <b>[7]</b></li></ol>
<b>Lecture Topics</b>	<ul style="list-style-type: none"><li>▪ Societal impact of engineering</li><li>▪ Engineering Ethics</li></ul>
<b>Coordinator</b>	Guoping Wang, Ph.D.
<b>Date</b>	8/20/2024