

Course	ENGR 41100 – Interdisciplinary Senior Engineering Design II
Cross-listed Course	ECE 406 – Electrical Engineering Design II ME 48800 – Mechanical Engineering Design II
Type of Course	Required – satisfies the capstone senior design II requirement for engineering students
Catalog Description	Continuation of ENGR 410. Teams complete their projects by implementing what they have designed in ENGR 410. This includes building, testing, evaluating, and demonstrating their end products.
Credits	3
Contact Hours	3
Prerequisite Courses	ENGR 41000
Corequisite Courses	None
Prerequisites by Topics	Interdisciplinary Senior Engineering Design I
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	<p>Students who successfully complete this course will have demonstrated an ability to:</p> <ol style="list-style-type: none"> 1. 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. Build test and evaluate the basic design completed in the first semester. (2) 3. Function within a multidisciplinary team. (5) 4. Present his/her work both written and orally. (3) 5. Be knowledgeable of contemporary issues. (4) 6. Understand ethical issues that are associated with the engineering profession. (4) 7. Understand the societal impact of engineering. (4) 8. Recognize the need for life-long learning. (7)
Lecture Topics	<ol style="list-style-type: none"> 1. Introduction 2. Knowledge of contemporary issues 3. The broad education necessary to understand the impact of engineering solutions in global and societal contexts 4. Recognition of the need for life-long learning 5. Understanding professional and ethical responsibility 6. Discussion related to oral presentations 7. Oral presentations
Computer Usage	Low
Laboratory Experience	Low
Design Experience	High
Coordinator	Hosni Abu-Mulaweh, Ph.D.
Date	26 February 2018