



Sample Brief Course Description	
Course title	Capstone Design Project (1)
Course code	ECE 492
College	Engineering
Department / Program	Electrical Engineering /Electronic, Communications & Renewable Energy Engineering
Year/ Level	5 th year / 9 th Level
Course Type	A. <input type="checkbox"/> University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Others b. <input checked="" type="checkbox"/> Required <input type="checkbox"/> Elective
Credited Hours	2
Contact Hours	(LT:1, LB:2, TR:0)
Pre-requisites (if any)	To complete 136 hours
Co-requisites (if any)	---
Course description	A two-semester course sequence that integrates various components of the curriculum in a comprehensive engineering design experience. Design of a complete project including establishment of objectives and criteria, formulation of design problem statements, preparation of engineering designs. The design may involve experimentation, realization and/or computer project. The project may be implemented using software, hardware, or a combination of both. Team design projects, where appropriate, are highly encouraged.



Course Main Objectives	By the end of the course, the student is expected to design and develop a complete system or make an investigative analysis of a technical problem in the relevant area. Students will apply the knowledge gained in earlier courses to the design process. The student will be familiarized with the engineering design process: Definition, Synthesis, Analysis and Implementation.
Learning Outcomes	1. Knowledge and Understanding: 1.1 Review data, knowledge along with their application in the field of electrical engineering. 1.2 Recognize project problem and statement based on electrical engineering principles. 1.3 Identify the project parameters and assumptions based on new developments related to the field of electrical engineering. 1.4 Recall research methodologies used in reports, presentations, and research related to electrical engineering. 2. Skills: 2.1 Apply knowledge of engineering science and methods to solve complex engineering problem 2.2 communicate and achieving the project design details orally and in writing. 3. Values: 3.1 Work effectively as a member of a team. 3.2 Demonstrate commitment to professional and academic values and standards and ethical code of conduct as experts in the field of electrical engineering.
References	Required Textbooks: Design for Electrical and Computer Engineers - Theory, Concepts and Practice”, R. M. Ford and C. S. Coulston, New York: McGraw-Hill, 2008 (Recommended Reference), ISBN-10: 0132774208.