

COURSE PROFILE

Course Number : EE490	Course Title : Project
Required / Elective : Required	Pre-requisite : Senior standing
Catalog Description: Design and development of a project for an electronics, signal processing or communication engineering problem under the supervision of an academic advisor; submission of the results in the form of a project report and oral presentation.	Textbook / Required Material :
Course Structure / Schedule : (0+0+8) 4 / 7 ECTS	
Extended Description :	
Design content : Design and development of a project (software/hardware) for an electronics, signal processing or communication engineering problem.	Computer usage: Design softwares/packages (Matlab and Simulink, Pspice etc.).
<p>Course Outcomes:</p> <p>An ability to apply knowledge of mathematics, science, and engineering to problems in electronics engineering. [2]</p> <p>Students will get an ability to recognize the needs and challenges of our age, and to assess the global and social impacts of engineering solutions. [3]</p> <p>Students will get an ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. [4]</p> <p>Students will get an ability to formulate a real-world problem, develop its requirements and a design solution for the set of requirements. [6]</p> <p>Students will get an ability to test and validate the conformance of the developed prototype against the original requirements of the problem. [7]</p> <p>Students will get an ability to work as a responsible member, and possibly a leader, of a team in developing software/hardware solutions and participate in, and possibly moderate, discussions that lead to making decisions. [8]</p> <p>Students will get an ability to express technical ideas, strategies and methodologies in oral and written form. [9]</p> <p>Students will get an ability to recognize the need for, and be motivated to engage in life-long learning. [10]</p> <p>Students will get an ability to learn new tools, devices, algorithms, and/or techniques that contribute to the software/hardware solution of the project. [11]</p> <p>Level of contribution of course to program outcomes: Strong: 2, 4, 6, 7, 8, 9 Average: 3, 10, 11 Some: -</p>	

Recommended reading: books, software manuals, webinars, technical documents, data sheets etc.	
Teaching Methods: Pre-readings, lectures, individual exercises and group work.	
Assessment Methods: [Related to course objectives] Final (oral presentation). For each student, a project evaluation form is prepared to evaluate each student's performance in verbal communication skill; teamwork, and formulating, planning and implementing the assigned senior design project under several constraints.	
Student Workload:	
Self Study	50 hrs
Discussions	28 hrs
Project work	70 hrs
Report writing	20 hrs
Prepare Presentation	6 hrs
Final Exam (oral presentation)	1 hrs
TOTAL 175 hrs ... to match 25 x 7 ECTS	
Prepared by : Assistant Prof. Umit Guz	Revision Date : 02.02.2010