



Course Title	Graduation Project	Coordinator		Dr. Usman Mohammed Farooq	
Course Code	591EE-3	Credit Hrs.	3	Contact Hrs.	3
Prerequisites	Department approval (Student should have no more than 40 credits of coursework).	Level/Year		9-10/5	
<p>Course Objective: The main objective of this course is to impart practical knowledge of Electrical Engineering. The students will develop the ability to use software and hardware tools relevant to Electrical engineering to design and develop practical models of electrical engineering applications. The objectives of this course where student can:</p> <ul style="list-style-type: none"> ● Select and plan an engineering project involving analysis and design tasks ● Perform a literature survey ● Formulate, as a team, electrical engineering design ● Perform the relevant calculations, analysis, and implement the design. ● Understand economic, environmental issues related to technology. ● Evaluate the impact of engineering on societal issues. ● Communicate technical information in writing. ● Communicate in oral and critically evaluate technical information 					
<p>Teaching Method: Independent study/research, group discussion, meetings are scheduled with the supervisor for the particular project. Each student's group will meet together weekly, keeping detailed minutes of the meetings.</p>					
<p>Course Learning Outcome:</p> <ul style="list-style-type: none"> ● An ability to apply knowledge of mathematics, science, and engineering relevant to electrical engineering ● Understanding of health & safety issues and legal responsibilities ● Analyze a problem and design a solution by applying mathematics, science and engineering principles ● Design and develop a system/model relevant to electrical engineering ● Design and implement a system/model based on specified requirements and constraints ● Staying abreast on the topic of the project and understanding the applications and implications of the project outcome ● Ability to use software/hardware and equipment relevant to the project topic ● Understanding the importance of continuous professional development ● Team working and interpersonal skills ● Professional and ethical responsibility ● Familiarity of current trends and developments ● Written communication skills ● Oral communication skills 					
<p>Topic Covered</p> <ol style="list-style-type: none"> 1. Project proposal and Literature survey of the project topic, Problem definition 2. Design plan - Determining the required components/equipment/software and 					



initiating the procurement process 3. Implementation plan - Learn to use the components / equipment / software and plan the project implementation stages (4 stages) 4. Presentation of objectives, literature and plan for project implementation 5. Implementation - Stage 1 Initial design and analysis 6. Implementation - Stage 2 Design and analysis and implementation of any modifications 7. Implementation - Stage 3 Final design and analysis Prepare plan for project report 8. Implementation - Stage 4 Test, troubleshoot and have a functional model of project. Project report: Introduction and literature chapters 9. Completion and submission of project report. Final presentation 10. Revision of report based on examiner's comments and approval by examiner's	
Text Book (s):	
<ul style="list-style-type: none"> Varies with the particular project. 	
Reference Materials:	
<ul style="list-style-type: none"> Varies with the particular project. 	
Mode of Evaluation:	
First Presentation Assessment (by Examiners)	10
Final Presentation Assessment (by Examiners)	20
Report Assessment (by Examiner)	10
Supervisor Assessment (Participation, Teamwork, Knowledge of project)	60
Total	100
Course Ground Rules	
The following department rules will be applied: <ul style="list-style-type: none"> The deadline for submitting a hard copy of the project report is one week before the presentation. If student does not submit the report on time, a 25% of the report grade will be deducted for every day delay. All rules mentioned in the Senior Design Project Guidelines Document are applicable Other additional rules by the supervisor 	