

Course Title	Graduation Project	Coordinator		DrElfatih A. Elsheikh	
Course Code	591-EE-3	Credit Hrs.	3	Contact Hrs.	3
Prerequisites	Department approval (Student should have no more than 40 credits of coursework). Consent of supervisor	Level/Year		9-10/5	
<p>e 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 are for students to:</p> <ul style="list-style-type: none"> ● Select and plan an engineering project involving analysis and design tasks ● To perform a literature survey. ● Formulated, as a team, electrical engineering design ● Perform the relevant calculations and analysis and implement his design. ● Understand economic and environmental issues related to technology. ● Evaluate the impact of engineering on societal issues. ● Communicate technical information in writing. ● To communicate orally and critically evaluate technical information. 					
<p>Teaching Method: Independent study/research, group discussion, and meetings are scheduled with the supervisor for the particular project. Each student's group will meet weekly, and detailed minutes will be kept of the meetings.</p>					
<p>Course Learning Outcome:</p> <ul style="list-style-type: none"> ● Broad, in-depth, integrated body of knowledge and comprehension of the underlying theories, principles, and concepts in electrical engineering and related disciplines Understanding of health & safety issues and legal responsibilities ● In-depth knowledge and comprehension of processes, materials, techniques, practices, conventions, and/or terminology in electrical engineering. Design and develop a system/model relevant to electrical engineering ● A broad range of specialized knowledge and understanding informed by current developments in electrical engineering, profession, and related discipline Staying abreast on the topic of the project and understanding the applications and implications of the project outcome ● Apply integrated theories, principles, and concepts in various contexts related to electrical engineering, profession, and discipline. ● Solve problems in various complex contexts in electrical engineering and related disciplines. ● Understanding the importance of continuous professional development ● Teamwork and interpersonal skills ● Professional and ethical responsibility ● Familiarity with current trends and developments ● Written communication skills ● Oral communication skills. 					

Topic Covered	
<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	
<p>The following department rules will be applied:</p> <ul style="list-style-type: none"> ● The deadline for submitting a hard copy of the project report is one week before the presentation. ● If a student did not submit the report on time, 25% of the report grade will be deducted for every day of delay. ● Other additional rules by the supervisor 	