

## Faculty of Engineering & Technology

### Graduation Project

**Information :**

**Course Code :** COM 500

**Level :** Undergraduate

**Course Hours :** 0.00- Hours

**Department :** Specialization of Electronics & Communication

**Instructor Information :**

Title	Name	Office hours
Lecturer	AHMED SAEED ABDELSAMEA SAYED	
Lecturer	Nermin Mohamed Fawzy Mahmoud Salem	

**Area Of Study :**

- “Develop the students knowledge about the fundamentals and contemporary topics related to electronics & communication domain of the project.
- “Train students to apply knowledge of mathematics, science, information technology, electronics and communication engineering knowledge and practices integrally to design and/or implement a process, component or system related to electronics & communication engineering.
- “Enhance students programming skills, software tools applications and/or practical capabilities appropriate to the project domain.
- “Develop students soft skills including writing and presentation skills; team work; lifelong learning skills; effectively managing tasks, resources and time; and interface to real life applications.

**Description :**

An engineering assignment requiring the student to demonstrate initiative and assume responsibility, The student will select a project at the end of the ninth semester, Students can propose their own project, A faculty member will provide supervision, A project report is required at the end of the tenth semester

**Course outcomes :**

**a.Knowledge and Understanding: :**

1 -	Recognize fundamentals, theories and/or practices gained during the study program and relevant to the project domain.
2 -	Identify quality assurance systems, codes of practice and standards, health and safety requirements appropriate to the topic of the project.
3 -	Recognize electronics & communication engineering topics related to the project domain.
4 -	Describe design methods and tools for electronics & communication engineering equipment and systems relevant to the project domain

**b.Intellectual Skills: :**

1 -	Think in a creative and innovative way in problem solving and design.
2 -	Analyze real-life problems.
3 -	Use software package related to the topic.
4 -	Exchange different ideas and knowledge from range of sources for solving electronic and communication systems problems.

5 -	Investigate the failure to develop innovative solution for electronic and communication systems, and processes.
<b>c. Professional and Practical Skills: :</b>	
1 -	Professionally merge the knowledge of electronic and communication systems to improve design, products and services.
2 -	Implement suitable solutions
3 -	Use computational facilities and related software tools, measuring instruments, workshops and/or relevant laboratory equipment to design and diagnosis experiments, collect data, analyse and interpret results.
4 -	Follow up safety requirements at work.
5 -	Apply quality assurance with the appropriate codes and standards.
6 -	Present a technical report.
7 -	Exchange knowledge and skills with communication systems engineering community and industry.
<b>d. General and Transferable Skills: :</b>	
1 -	Collaborate effectively within multidisciplinary team.
2 -	Work in stressful environment and within constraints.
3 -	Communicate effectively.
4 -	Demonstrate efficient IT capabilities.
5 -	Lead and motivate individuals.
6 -	Effectively manage tasks, time, and resources.
7 -	Search for information and engage in life-long self-learning discipline.
8 -	Acquire entrepreneurial skills.
9 -	Refer to relevant literatures.

<b>Course Topic And Contents :</b>			
<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial / Practical</b>
Project Selection and Specification	10		
Literature Review and Background Study	20		
Planning For The Project	10		
Analysis and Design	40		
Implementation	60		
Testing	20		
Debugging and Finalization	20		
Documentation	20		

<b>Teaching And Learning Methodologies :</b>
Interactive Lecturing
Discussion
Problem Solving
Experiential Learning
Cooperative Learning

Research

Field Visit

Case study

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Final exam	50.00		
Assignments	5.00		
Computer project	10.00		
monthly presentation	10.00		
Participation and Discussion	25.00		