

## **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:

ÄDevelop the studentsαknowledge about the fundamentals and contemporary topics related to electronics & communication domain of the project.

# **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: :

- 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.

Árain 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.

Ænhance studentsoprogramming 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.



5 -Investigate the failure to develop innovative solution for electronic and communication systems, and processes. c.Professional and Practical Skills: : 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. d.General and Transferable Skills: : Collaborate effectively within multidisciplinary team. 1 -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.

Course Topic And Contents :	
Topic	No. of hours Lecture Tutorial / Practical
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

Teaching And Learning Methodologies :	
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
″Æinal exam	50.00		
Assignments	5.00		
Computer project	10.00		
monthly presentation	10.00		
Participation and Discussion	25.00		