GANPAT UNIVERSITY

FACULTY OF ENGINEERING & TECHNOLOGY

Programme	Bachelor of Technology	Branch/Spec.	Electronics and Communication Engineering
Semester	VII	Version	1.0.0.0
Effective from Academic Year	2026-27	Effective for the Batch admitted in	July 2023
Course Code	2EC7103	Course Name	Mini Project

Teaching Scheme						Examination Scheme (Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	0	0	2	0	2	Theory	-	-	-
Hours	0	0	4	0	4	Practical	30	20	50

Pre-requisites

Basic knowledge of

- Analog & Digital Electronics, Signals and Systems, Communication Systems, Microprocessors / Microcontrollers, Programming using MATLAB / Python / Embedded C

Course Outcomes

On successful completion of the course, the students will be able to:

CO1	Identify and analyze real-world problems related to Electronics & Communication Engineering.
CO2	Apply appropriate engineering principles, tools, and techniques to design a mini project.
CO3	Implement hardware/software solutions and validate results experimentally or through simulation.
CO4	Work effectively as an individual or as a member of a team while managing time and resources.
CO5	Prepare technical documentation and present project outcomes effectively.

Practical Content:

Unit	Content	Hrs.
1	A student is required to prepare a mini project in the domain of Electronics and Communication Engineering, relevant to any of the core or elective subjects studied during the semester such as Analog & Digital Communication, Signal Processing, Embedded Systems, VLSI, Wireless Communication, IoT, RF & Antenna systems, Image Processing, or related emerging technologies. The student shall deliver periodic internal presentations during the semester to demonstrate progress in problem identification, system design, implementation, and result analysis. Each student/group must prepare a comprehensive project report covering objectives, methodology, design approach, implementation details, results, and conclusions. At the end of the semester, the student(s) shall demonstrate and defend the project work before a panel of examiners as part of the final evaluation. The mini project may be carried out individually or in a group of maximum four students. The group size shall depend on the complexity, scope, and depth of the project, as approved by the faculty guide and department.	60

Mapping of CO with PO and PSO:															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	1	2	2	-	-	-	-	-	1	-	2	1	-
CO2	3	3	2	3	3	2	-	-	-	2	1	-	2	2	-
CO3	3	3	3	2	3	-	-	-	-	-	1	-	3	3	-
CO4	2	2	-	-	-	-	-	-	3	-	-	-	1	2	-
CO5	-	-	-	-	-	-	-	1	1	3	-	-	1	2	-