

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING & TECHNOLOGY									
Programme		Bachelor of Technology				Branch/Spec.		Electronics and Communication Engineering	
Semester		VIII				Version		1.0.0.0	
Effective from Academic Year			2026-27			Effective for the Batch admitted in			July 2023
Course Code		2EC8101		Course Name		Major Project			
Teaching Scheme					Examination Scheme (Marks)				
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	0	0	20	0	20	Theory	-	-	-
Hours	0	0	40	0	40	Practical	200	200	400
Pre-requisites									
Basic knowledge of									
<ul style="list-style-type: none"> <li>Analog &amp; Digital Electronics, Signals and Systems, Communication Systems, Microprocessors / Microcontrollers, Programming using MATLAB / Python / Embedded C</li> </ul>									
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 major 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	<p>A student is required to prepare a major 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 &amp; Digital Communication, Signal Processing, Embedded Systems, VLSI, Wireless Communication, IoT, RF &amp; Antenna systems, Image Processing, or related emerging technologies.</p> <p>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.</p> <p>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.</p> <p>The major 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.</p>								40

**Mapping of CO with PO and PSO:**

	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	P O 10	P O 11	P O 12	P S O 1	P S O 2	P S O 3
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	-