

**RUBRICS: MINOR/MAJOR PROJECT (EI37991/EI47999/EI47499)**

Criteria	Excellent (9-10)	Good (7-8)	Average (5-6)	Poor (0-4)	Weight (%)
<b>1. Problem Definition &amp; Scope</b>	Problem statement is exceptionally clear, well-defined, and highly innovative. Objectives are relevant, challenging, and aligned with industry trends.	Problem is clearly defined with relevant objectives; minor improvements could further clarify scope or innovation.	Problem statement is recognizable but lacks depth or a clear innovative direction.	The problem is vague, poorly defined, or lacks alignment with core engineering challenges.	10
<b>2. Research &amp; Literature Review</b>	Comprehensive review with extensive use of current and relevant literature. Demonstrates critical analysis and integrates state-of-the-art methods.	Good review with a solid reference base; shows some critical analysis though may miss a few key sources.	Adequate review; includes basic references but lacks critical depth and scope.	Minimal/no review of literature; misses key references and fails to contextualize the project.	10
<b>3. Design &amp; Methodology</b>	Exceptionally robust and detailed design. Methodology is clearly articulated with modern techniques, simulation models, and logical planning.	Structured design, with clear methodology; minor gaps may exist in the depth or rationale of certain design steps.	Design and methodology are present but remain basic; lacks detailed planning and context for chosen methods.	Design is poorly conceived or documented; methodology is unclear and lacks a logical or systematic approach.	20
<b>4. Implementation &amp; Integration</b>	Outstanding integration of hardware and software components. Implementation is meticulous, reflecting excellence in circuit design, sensor interfacing, and control systems.	Implementation is sound with only minor integration issues; demonstrates a solid grasp in system assembly.	Implementation shows the basic functionality but has noticeable gaps or integration challenges between modules.	Implementation is significantly flawed; critical modules are either missing or improperly integrated.	20
<b>5. Testing, Validation &amp; Analysis</b>	Comprehensive testing strategy with quantitative validation, rigorous analysis, and effective troubleshooting. Results are well-documented and reproducible.	Good testing and analysis; objectives are met with minor inconsistencies in analysis.	Basic testing procedures are evident; validation is partly complete, and analysis lacks robustness.	Testing is minimal or absent; validation are unclear, and analysis is insufficient to prove functionality.	15
<b>6. Documentation &amp; Reporting</b>	Exceptionally clear, professionally structured, and detailed project report. Documentation adheres to high academic and industry standards.	Thorough and clearly written report; minor improvements in structure or detail could enhance clarity.	Report is adequate but may lack comprehensive details, cohesiveness, or technical depth in parts.	Poor Documentation: hindering understanding of the project work and outcomes.	10
<b>7. Presentation &amp; Defense</b>	Excellent oral presentation with clear articulation, confident delivery, and strong command of technical content. Answers questions with depth and clarity.	Clear explanation; demonstrates good understanding although response to questions may lack full depth.	Basic presentation; communicates main points but may be hindered by clarity, pace, or preparedness for queries.	Presentation is unclear and unstructured; inability to defend project details or answer technical questions effectively.	10
<b>8. Innovation &amp; Creativity</b>	The project exhibits significant originality and a creative approach to problem-solving, incorporating novel instrumentation methods or technologies.	Demonstrates a degree of creativity with some innovative elements integrated into the project approach.	Standard application with minimal innovation; relies on existing techniques without enhancement.	Lacks any innovative approach; the project is derivative and does not show new insights / methods.	5
<b>Total</b>					<b>100</b>

