TRC2001 - Project Proposal

The project proposal consists of a **Poster** and **Project Management Document** to evaluate the following learning outcomes:

- LO2 Apply knowledge of basic subsystems (mechanical, electrical, electronic, computing, electromechanical) to create an engineering system (either in hardware or simulations or both) with consideration for design specifications.
- LO4 Demonstrate the ability to communicate project outcomes and achievements effectively with stakeholders.

1. Poster

- Project Title, Team Number and Team Name
- Introduction
 - o Background, need analysis, problem statement
- System Overview
- Proposed Solutions
 - Proposed solution, justification for proposed solution, overview and details of proposed solution.
- Conclusion (Expected Outcomes)
- References (If Any)

Note: Maintain the same font type, font size and other font format as given in the poster template.

2. Project Management Document

- Team Profile (week 2)
- Roles and Responsibilities (week 2)
- Shared Drive (week 3)
- Logbook (week 3)
- Work Breakdown Structure, WBS (week 4)
- Alternative Designs (week 4)
- System Hierarchy (week 4)
- Gantt Chart (week 5)
- Bill of Materials, BOM (week 5)
- Budgeting (week 5)

3. Idea Pitching

The purpose of this pitching is to convince your engineering lecturer that your proposed solution can solve the problem. Assume that your engineering lecturer do not know about your project. You pitching must catch your engineering lecturer's interests for the entire 3 minutes.

- Pitching Duration: 3 minutes
- Feedback and Discussion: 3 minutes
- Number of Presenters: Determined by the group
- Visual Aids: Not compulsory. Hardcopy Proposal Poster

4. Project Proposal Poster Marking Rubrics (LO2) – 3%

Item	Weight	4	3	2	1	0
Title Succinct functional description of project, appropriate keywords.	1	Title is appropriate, informative and attractive.	Title is appropriate and informative (i.e. using suitable keywords).	Title is suitable but not attractive.	Title is confusing.	Title is unrelated to project (i.e. using irrelevant terms).
Introduction Depth and clarity of background, need (motivation) of project, problem statement.	2	Well-articulated, and provides the big picture.	Provides the big picture.	Does not relate to the project very well.	Some aspects missing, obvious improvements needed.	Unrelated to project.
Objectives SMART and innovative.	2	Innovative and SMART.	Clearly defined and measurable with appropriate keywords.	Clearly defined and somewhat measurable.	Clear but lacks focus.	Unclear or inappropriate.
Design Concept and Solution Design concept, overview, proposed solution, system thinking.	3	System well described. Choice of proposed solution clearly articulated with reasons and justifications.	System well described. Choice of proposed solution clearly articulated.	System description is not clear, or choice of proposed solution is confusing.	System description or choice of proposed solution is missing.	Items covered are not related to each other.
Conclusion Relates to objectives and proposed solution.	1	Sums up the proposal completely and succinctly.	Establishes valid links and conclusions.	Establishes weak links and conclusions.	Superficial conclusions.	Irrelevant conclusions.
Language and Communication Grammar, spelling, articulation of ideas.	2	No spelling or grammatical errors. Written in succinct yet attractive manner.	-	Contain minor errors in grammar and spelling.	-	Contain significant errors in grammar and spelling.
Appearance Aesthetics, neatness and good formatting in all sections.	1	Poster is neat and pleasing to the eye.	Poster is acceptable.	Poster is not pleasing to the eye.	Poster is confusing or difficult to understand.	Poster is untidy or dirty.
Pitching Deliver your idea to the audience in an exciting manner.	1	Pitching is clear and concise. Audience is able to maintain interests for the entire 3 mins.	Pitching is clear and concise. But audience is unable to maintain interests for the entire 3 mins.	Pitching is not clear or is confusing.	Speech is given. But it is not pitching.	Speech ends early (less than 2 mins 30 secs) or over time (more than 3 mins 30 sec).

5. Project Management Documentation (LO4) – 2%

Item	Weight	4	3	2	1	0
Project Management Documents Appropriate system hierarchy, work breakdown structure, resources/budget, team profile	3	All documents are complete and connected to each other and give a clear picture of the	All documents are complete and connected to each other.	All documents are somewhat complete but not well connected.	Some documents are included but well connected.	Some documents are included, and not well connected.
and responsibility matrix. Bill of Material	2	complete and actionable list of items.	Needs minor correction for it to be actionable.	Incomplete specifications.	No specifications.	Irrelevant items.
Gantt Chart Mapped to objectives, appropriate timeline.	2	Mapped to objectives appropriately.	Mapped to objectives but lacks clarity or unreasonable timeline.	Mapped to objectives but lacks clarity.	Does not mapped to the objectives.	Not a Gantt Chart.
References	1	Very relevant references, in suitable quality.	-	-	-	Irrelevant references.