

Project Proposal Documentation Submission

This project proposal serves as a conceptual and academic foundation for Thesis 1. It is intended to demonstrate your ability to:

- Identify a viable research or development problem
- Ground the problem in scholarly literature
- Propose a coherent and feasible direction for the full thesis work

This is not yet a full thesis proposal, but it must already meet academic writing and formatting standards.

Submission Guidelines

Submission format: Softcopy only

Accepted file format: PDF (single consolidated file)

Submission method: Via the official course submission link

Filename format:

Group Name_ProjectProposal.pdf

Formatting Requirements (APA 7th Edition)

Paper size: A4

Margins: 1 inch on all sides

Font:

Times New Roman, 12 pt or

Arial, 11 pt

Line spacing: Double-spaced

Paragraph alignment: Left-aligned

Page numbers: Top-right corner

Headings: Follow APA 7 heading levels

Citations and references: Strictly APA 7 format

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Introduction (800–1,000 words)

Background of the Study (500–600 words)

Describe the domain problem, current practices, and technological context.

Rationale of the Study (300–400 words)

Explain why the problem is worth solving and why a CS-based solution is appropriate.

Problem Statement (300–400 words)

General Problem (1 paragraph)

Specific Problems (3–5 numbered items)

Each problem must be answerable by the proposed system or study.

Objectives of the Study (250–300 words)

General Objective (1 paragraph)

Specific Objectives (3–6 numbered objectives)

Use measurable verbs (design, develop, evaluate, analyze).

Significance of the Study (300–400 words)

Discuss the beneficiaries, including students, advisers, institutions, and future researchers.

Scope and Delimitation (200–300 words)

Clearly state what is included and excluded. Avoid vague statements.

Review of Related Literature (2,000–2,500 words)

Discuss foundational concepts, trends, and relevance to student performance prediction. Cite at least 10 studies.

Review supervised learning models such as decision trees, logistic regression, random forest, and neural networks. Compare strengths and limitations.

Existing Student Advising and Early-Warning Systems

Analyze prior systems, platforms, or frameworks used in academic advising. Highlight system features and gaps.

Research Gaps Identified

Synthesize the reviewed literature and clearly state what is missing, insufficient, or unresolved, and how this relates directly to the proposed study.

Conceptual Framework (300–400 words)

Explain the relationship between inputs, processes, and outputs.

System Architecture (300–400 words)

Describe the logical and physical components of the system.

Architecture Diagram (Appendix A):

[User Interface] | [Application Server] | [ML Engine] | [Academic Database]

Project Overview (300–400 words)

Describe the proposed system or solution, key features, and user roles.

Initial Methodological Direction (400–500 words)

Briefly discuss research design, data sources, model training approach, and evaluation direction. Do NOT include full instruments.

Expected Output and Contributions (200–300 words)

List tangible outputs and expected contributions to CS and practice.

Project Management Plan (300–400 words)

Gantt Chart (Appendix B)

PERT Diagram (Appendix C)

CPM Network (Appendix D)

Explain task dependencies and identify the critical path.

Conclusion (200–300 words)

Summarize the proposal and reaffirm feasibility and relevance.

References (Minimum 10, APA 7)

Appendices

Appendix A – System Architecture Diagram

(Expanded, redrawn version of Section 8)

Appendix B – Gantt Chart

(Detailed timeline)

Appendix C – PERT Diagram

(Task dependency visualization)

IMPORTANT REMINDERS:

Follow APA 7 strictly.

Stay within word limits ($\pm 10\%$).

Appendices must be referenced in-text.

This proposal is expected to reach ~40 pages when properly formatted, including figures and spacing.