

Project Proposal Outline

The project proposal must be in the same format, and of the same quality, as a proposal that you, as a practicing engineer, would submit to a prospective client. Please assume that the course instructor is the customer unless you have a specific customer or need in mind. The proposal must include sections 1–8 and 10 below:

1. Letter of transmittal
 - a. State your point
 - b. Explain how you learned of the customer's need
 - c. Explain why your proposal will be superior to others
 - d. Comment on your organization's qualifications
 - e. Express appreciation for consideration; offer to discuss in person
2. Title page
3. Abstract or executive summary
4. Introduction
 - a. Subject and purpose
 - b. Definition of problem
 - c. Immediate background
 - d. Need for solution
 - e. Benefits that will come from solution
 - f. Brief summary of proposed solution(s)
 - g. Overview of proposal
5. Objectives and deliverables
 - a. Objectives: “ I propose to investigate..., to determine..., to design..., etc.”
 - b. Scope of work: what specific tasks or activities will be carried out to achieve the objectives.
 - c. Deliverables: Working model, prototype equipment, follow-up maintenance, design drawings, consulting services, etc.
6. Engineering or technical approach
 - a. Plan of attack, method of operation
 - b. Systematic presentation of intended procedures
 - c. Alternate approaches you plan to consider
7. Project management
 - a. Tasks: what will be done (collect parts, assemble equipment, gather data, analyze data)
 - b. Time: Gantt chart showing activities and their duration and order
 - c. Budget: materials, man-hours, travel, materials and supplies
 - d. Facilities
 - e. Personnel: summarize personnel needs; refer to the attached resumes.
8. Conclusion
 - a. Restate needs and benefits
 - b. Restate objectives
 - c. Summarize approach
 - d. Give costs and timeline
 - e. State willingness to modify proposal

9. Appendices

- a. Pert chart as needed
- b. Supporting illustrations, if any
- c. Supplementary tables and figures
- d. Cost breakdown information
- e. Extended analyses
- f. Lists of personnel

10. Attachments

- a. Resumes of key personnel
- b. Testimonial letters from previous customers
- c. Descriptions of earlier projects
- d. Revised specifications and effectiveness criteria as needed