

OREGON INSTITUTE OF TECHNOLOGY  
Mechanical and Manufacturing Engineering and Technology

Project Sequence : Design Proposal

The Design Proposal is the first item necessary in a design program. This will be the basis of work done for the rest of the project. If well prepared it will anticipate and account for many of the problems encountered down the road. Unlike a personal project it is essential to estimate the time and resources required for a program prior to initiating it. The Design Proposal will help you define these and present them in an orderly fashion.

The Proposal is a loose contract describing what you can and will do to accomplish an objective for your client. Although a formal quote or written contract is more legally binding the consequences for not performing on a Proposal are also real.

A Proposal should convince the client that you are as capable or more capable than anyone who might undertake the design. Write it in a positive sense but you must be realistic. A proposal should:

- Define precisely the reason or problem needing to be addressed.
- Propose one (or several) workable solution.
- Define the steps to be taken to arrive at a final solution.
- Estimate the time and dollars needed for the program.

The Design Proposal will contain the following section.

Title	Name of project, date, team members
Abstract	Brief (short paragraph) description of project.
Introduction/ Background	Brief introduction to report and project. Include preliminary information such as why the project is being undertaken, what has been done in the past, relevant literature, etc. Indicate in specific terms why the project should be undertaken.
Criteria/ Deliverables	Specify criteria the final result must meet to be successful. Provide the goals/objectives and technical requirements established by the client/customer and your team. Be specific and specify deliverables (what you will provide to the client at the end of the project).

This section will also include a sub-section specifically indicating the standards and realistic constraints defining the project's

environment.

Proposed Solution	Overview of project outcome or, at this early date, what you think the result will look like. Also, included in this section, is an explanation of why you feel a solution is viable and what work will be needed to arrive at that solution.
Tasks/Work Breakdown	A detailed breakdown of the tasks involved in the project. Each will describe the work to be done, specific outcomes of the task, time estimates for completion, and resources required. (Time here is billable hours not elapsed time.)
Schedule/ Time-line	Microsoft Project Gantt Chart showing time scheduling of the Tasks defined above.
Cost Estimates/ Budget	Ball Park estimates for the project costs including where funding will be obtained for design and construction.
Facilities and Equipment	Description of the anticipated facilities and equipment needed for the project. Facilities such as tools, equipment, floor space, etc.
Stakeholders	Describe who has a stake in the success of this project and why.
Personnel	Describe the skills and experience of the people involved in successfully implementing the project.

As with any report, references, appendices, etc. will be included.