

## Project Plan Requirements, ME481

**Overall:** The purpose of the project plan is to explain the project itself and to discuss the plan the team has developed to achieve the project objectives. It must reflect a well thought-out plan for the entire project, not just the first semester, but should not consider work beyond this semester. Use of headings is required.

**Title Page:** course name and number, project title, team name and individual's names, date, etc.

**Executive Summary:** (half page maximum) purpose, need, proposed program, and “bottom line” budget. This should be a “stand alone” summary for a busy executive to explain the plan and project that is described in detail in the document.

**Introduction:** purpose of project, purpose of document, scope and summary of document.

**Background:** describe information the reader requires to understand the document (the project and the plan). This might include historical perspective and/or a discussion of key technology. This should include discussion of literature search results including patent search results if appropriate. The background should “set the scene” for the document and prepare the reader to understand the document. This section should also identify at least one type of engineering standard that will be used for the project (the standard does not need to be identified by number for this plan). This may be a material standard, hardware standard, test standard, HVAC standard, etc.

### Proposed Program

Discuss project objectives, key characteristics (the most important design requirements) and include a criteria table and discuss the criteria in it

Discuss alternatives that are being considered (sketches generally required)

Discuss each of the major milestones (should have approximately 15-20 milestones) and include a table in of milestones in chronological order.

Describe at least 3 major concerns and describe how the team will address those concerns.

Discuss and include sketches, figures, and tables as appropriate to communicate what will be accomplished (sketches, etc. are often very effective communication tools – use them!).

Sketches or schematics of the anticipated final product are required

### Resources Required

Describe “outside” help required (non-team member work) such as shop support. For School of Engineering shop support, a “Shop Request Work Order” is required as an attachment.

Discuss “fundraising” plan (if fundraising is required) – who will you contact, how much funding is required, etc. (DO NOT CONTACT outside companies, foundations, etc.

**without first discussing with the course instructor!**)

### References (as a reference section, not as footnotes)

Appropriate quantity and quality

Proper citation within the text and proper reference section format at the end of the body

### Appendices or Attachments:

Completed charter

Itemized budget (potential categories: major items, travel, registration, miscellaneous, etc.)

“Shop Request Work Order” (if shop support is anticipated). Requires meeting with shop technician well **in advance** of completing this Project Plan.

**Writing Quality and Format:** proper use of headings, page numbers, 12-point Times New Roman, etc....as seniors, you know what writing quality means.