

Final Report Outline

Abstract

The abstract should be a summary of the overall project, including the problem statement, the general idea of how you solved the problem, and a concise statement of your solution. (~150-200 words)

Introduction/Background

Assume the reader is not familiar with this topic, but has an engineering background so that he/she can understand the technical analysis. Avoid jargon; if you use acronyms, use the full name the first time you refer to it and show the acronym in parentheses. (~ ½ to 1 page)

Problem Definition

Discuss how to approach the problem. Include a list of specifications as appropriate. Remember to include constraints; if a redesign: cost, size, etc. Convert the customer needs into engineering specifications. (~ ½ to 1 page)

Analysis

Using your analytical techniques, construct a model of the design.. Analyze the model as to accomplishing the desired goals or specs. Include references for all equations, assumptions, material properties, etc. Attach handwritten calculations as an appendix, but include enough information (basic equations and steps you followed) in the report so that the reader can follow and potentially repeat your analysis procedures. Include any figures that support your analysis. (Be concise and complete – section should be as long as needed to explain your analysis)

Final Design/Results

Make drawings (preferably an electronic version), tables, graphs, and pictures that illustrate the final results. If a redesign, explain the new aspects of your design as compared to the prior version. If an analysis, make final recommendations and comments based on your analysis. (Be concise and complete – section should be as long as needed to present your redesign or results)

Conclusions

Describe your results briefly and draw any conclusions. Do not simply restate the abstract. Is your design an improvement over an existing design? Could you make recommendations should the analysis need to be repeated in the future? The conclusion should be the final thought that you want the reader of your report to come away with. (~100-150 words)

References

Please write the report in your own words and use authenticated references wherever necessary, plagiarized (copied) reports will be graded zero.

Overall Grade

Grade based on readability, appearance, organization, drawings, etc.

Note: Word counts and page lengths are recommendations only, based on single-spaced, 12-pt font.