

**UNIVERSITY OF ILLINOIS AT CHICAGO
DEPARTMENT OF MECHANICAL & INDUSTRIAL ENGINEERING
ME/IE396: SENIOR DESIGN**

MEMO 5- FINAL REPORT SUBMISSION

Aim – Final report is a formal written document in which you describe the design approach and engineering analysis you take in reaching the final design option. In addition to providing detailed descriptions and engineering analysis of your recommended design option, it is very important to illustrate the systematic approach you take in reaching the solution. Once the design option is developed, it is also very important to demonstrate how you evaluate your design against the design requirements (constraints and criteria, etc.). Your report should be written in a way that people with technical background, but not necessarily having sufficient knowledge in the covered design subject, can easily understand the discussions.

Format – You are recommended to cover the following topics. You can design your own report format to best suit the nature of your project.

- Cover Page: Title, submitted to, submitted by (group name, student names), sponsor, faculty supervisor, semester
- Abstract (of project and report) (not to exceed one page)
- Table of Contents
- Statement of Need (Problem Background)
- Problem Statement
- Introduction of Design Approach (process, procedure, etc.)
- Detailed Examination of design criteria, constraints, and other specifications
- State-of-the-Art Survey
- Alternative Design Options (sketches, drawings, and descriptions)
- Selection of the Most Promising Design Option(s)
- Design & Analysis of the Recommended Design Option(s)
- Economic Analysis
- Design Evaluation
- Conclusion and Future Work
- Acknowledgements
- References
- Appendices (Other Supporting Materials)

All reports are to be produced in a professional style and are to be typewritten. Page numbers are needed for both the main text and appendices. Table and figure numbers are required for all tables and figures.

Deadline – Draft due on November 25 (Monday), final version due on December 11 (Wednesday).

*The individual evaluation sheet will be submitted separately in confidentiality. As a part of the final examination of the course, each individual is required to submit a one-page (single space) learning essay.