

by Prof Yaw - Draft September 30, 2011
General Outline of Structural Senior Project Report

Note: Some or all of the following may be applicable to your particular project. The final outline and report must be constructed and agreed upon by consultation with your senior project advisor.

1. Title Page - Project Title, Student Name (Civil Engineering), Advisor, Course Number, Date Completed
2. Acknowledgments - not required (Acknowledgments of those who have helped you)
3. Abstract - Summary of project and results
4. Table of Contents - Table of contents from Title page to last appendix.
5. Introduction - Include discussion of project purpose, objectives, goals for the project. Discuss the type of structure designed. What aspects/scope of work of structural design are included in the project, vertical, lateral, foundations, drawings, cost estimate, construction schedule? What is the main thesis of the paper?
6. Type of structure - Steel, concrete, timber, vertical system, lateral system, what is the structure for? How did you choose the vertical and lateral systems you have? Why did you not make different choices? What have you chosen for the foundations?
7. Loads - Discuss how you determined vertical loads and lateral loads and your main conclusions and some representative values.
8. Vertical Design - Discuss the process of vertical design. What did you consider? What were your final results? Beams, columns, connections, welding.
9. Lateral Design - Discuss the lateral design process. Discuss the lateral system for the structure designed. Discuss the results
10. Foundation Design - If applicable discuss the foundation design. What type of foundation? How did you choose the foundation used? What soil information did you have? What soil information is uncertain or not available? What assumptions did you make? What is the final conclusion of the foundation design?
11. Special Design Requirements - Discussion of special considerations.
12. Discussion of Drawings - Discuss the drawings prepared as part of this project. What drawings have been created? What drawings are not present?
13. Discussion of Cost Analysis - Discussion of cost analysis. How did you do the cost analysis? What are the results?
14. Discussion of Construction Schedule - If applicable discuss a construction schedule for your project.

15. Discussion of difficulties, unforeseen problems, how problems resolved, learning accomplished, what could be done different, design time line predicted versus actual time line, why did you not meet your original time line
16. Conclusions, Final Comments - Restatement of main thesis, discussion of success/results, final conclusions and comments, what could be better.
17. List of References/Resources/Codes
18. Appendix - List of Calculations first, then pages of calculations (note calculations must be done by hand, some portions may be done by using a computer program or spreadsheet with permission of prof. Yaw)
19. Appendix - List of Drawings, then pages of drawings
20. Appendix - List of Photos/Figures, then pages of photos and figures
21. Appendix - Project Time line, estimated, and final (students must meet with prof. Yaw weekly)