

Report Outline

1. Objective or Introduction: Describe briefly what the reader will see in your report.
2. Setup or procedure: Describe briefly how you create your FEM model in Unigraphics.
3. Describe the model. The number elements, type of elements, material properties as you specified in Unigraphics, type of approximation (such as taper being approximated by uniform cross-sections), section properties as you specified in Unigraphics, boundary conditions imposed, and the load values you prescribed in Unigraphics.

Comment: You may wish to combine steps 2 and 3. You may create tables to present data. You can use figures captured from the screen using 'snapshot'. There are many ways to describe your model. Choose a way that reflects your style and conveys information effectively.

4. Results and Discussion: Use figure numbers, table numbers, equation numbers (equations derived by hand that is attached as appendix) to discuss your results including any checks you made to ensure your FEM results are correct. Bring relevant observation to the attention of the reader rather than expect the reader to wade through a lot of figures.

Comment: The effort you spend in understanding your results is not only important for writing good reports but it is also critical in the development of your understanding of finite element analysis.

5. Conclusion: This is a brief synopsis of important observations, difficulties and recommendations.
6. Appendix: This can be hand written. Show any mechanics of material derivation, formulas and calculations here. Show the values of the variables you used in your computation.

Comment: In your professional career you will write many reports and papers. The effectiveness of these reports is very important to the success of your career. You may do excellent technical work but if you fail to communicate then people can't appreciate the quality of your work. Writing like tennis and many other activities is a skill that has to be mastered by doing it over and over again. If you are out of practice of writing then it will be hard to get started in the first few reports, but hang in there for it does become easier as you keep trying to write good reports.