

Presentation

Grade this section out of 5.

Judge the overall report presentation. Consider:

- Does the report overall give you a good impression?
- Does the quality of the presentation give you confidence in the quality of the content?
- Does the proposal meet specification (length, etc.)?
- What is the overall quality of English Expression? Is technical jargon correctly used? Is the language clear and concise?
- Is the report correctly sectioned? Do the sections flow correctly and aid the overall argument?
- Are figures presented in a clear way that maximises the communication of information?
- Is the referencing consistent and easy to follow?
- Overall, is the contained information efficiently communicated to the reader?

Context and Aims

Grade this section out of 5.

Judge how well the major project has been put into context. Consider:

- How well has the *real world* problem been considered? Why is it important and suitable for numerical analysis using FE.
- What background information has been provided to justify that the project is meaningful/achievable?
- Do you as a reader understand the context of the problem and how solving it makes a valuable contribution to knowledge?

Model Definition

Grade this section out of 10.

How well has the *real world* problem been converted into a *mathematical problem*? Consider:

- What assumptions/simplifications has the author made in order to reduce the complexity of the problem to a manageable level?
- Are the assumptions reasonable and valid?
- Has the author managed to isolate key aspects of the real world problem so that they can be solved with simple mathematical models?
- Overall, has the author demonstrated an approach which, in your opinion, is simple enough to be solved mathematically yet complex enough to capture important information about the real world problem at hand?

Analysis and Numerical Model

Grade this section out of 10.

How well has the author converted the *mathematical model* of the problem into a *numerical model*? Consider:

- Choice of analysis methods
- Choice of element type(s) suitable to achieve the desired results
- Choice of boundary conditions, loads, contact, etc.
- Overall, has the author chosen an appropriate discretisation scheme for solving the mathematical model proposed.

Results and Validation

Grade this section out of 15.

How well has the author articulated their results and validated them? Consider:

- What results has the author achieved? Are they the correct results to solve the problem they have proposed?
- Are simple problems used to check the results of more complex ones? How valid are the additional simplifications?
- Has the author demonstrated how independent data (experimental or otherwise) corroborates with their results?
- Has the author considered the convergence of their numerical results with reduced element size?

Discussion and Conclusion

Grade this section out of 15.

What has the author actually learnt about the world by doing conducting the analyses in the report? Consider:

- How well do the results answer the original problem?
- How has the author's own viewpoint been changed by conducting the analysis and how have they influenced your viewpoint as a reader?
- Can the author clearly articulate the value AND limitations of what they have achieved?
- Has the author outlined what the obvious next stage of the analysis would be (i.e. future work)? How achievable is the proposed future work?

Impact

Grade this section out of 10.

Overall, how does the report resonate with you as an assessor? Consider:

- Does the report as a whole feel complete, concise and valuable?
- Do the results have real-world application? Should this be the start of further study?
- Do you get the impression that the author really understood the task and scoped the project perfectly?