

SVV Grading 2019

This document contains the grading sheet that is used for the simulation plan and report for the structural analysis assignment. Partial grades can be given as well on the boundary of two columns in the grading sheet, e.g. resulting in a partial score of 75 rather than 70 or 80. For the assessment procedure and calculation of the final course grade see: 'Assessment' on Brightspace.

The grade for the simulation plan and final report follow directly from the weighted averages of the partial grades in the grading sheet with the weights given there. The grade for the simulation plan is the grade of the grading sheet divided by 10.

Structures simulation plan grading sheet

	0	40	60	70	80	100
Report Overview 5%	Task division is missing	Report is not structured Many incorrect sentences Task division incomplete	Structure sufficient Several spelling and grammatical errors Task division present, but needs revision	Good structure Minor and spelling and grammatical errors Clear task division present	Good structure and layout, references included Few spelling and grammatical errors	Very good structure and layout, textbook style, including referencing No spelling and grammatical errors
General Part 15%	Problem not introduced Output variables not identified No general assumptions No reference frames No units	Introduction of problem unclear and/or has mistakes Output variables not completely or wrongly identified Important general assumptions missing, effects are not described Some reference frames missing	Introduction of problem sufficiently clear, but with mistakes Important output variables correctly identified, but mistakes in reasoning Important general assumptions are mentioned and some effects Reference frames present, but with mistakes Several units missing	Introduction of problem more than sufficient Output variables correctly identified, but minor mistakes in reasoning Important general assumptions are mentioned and their effect on results Reference frames more than sufficient, but with small mistakes Few units missing	Good Introduction of problem Output variables correctly identified and good reasoning Important as well as smaller assumptions are mentioned, expected effect on results described. Reference frames good All units given	Very good and concise introduction of problem, as in a textbook. Output variables correctly identified and very good reasoning Creativity shown in identifying all assumptions and identifying effect on results Reference frames very good, and consistent with the text All units given and in correct layout
Flow Chart 5%	No flow chart of proposed code present	Missing important parts of the proposed code No input or output variables given (or links to them) Parts are unreadable	Containing most important code blocks Missing some important code blocks Missing important input and output parameters Parts are difficult to read	Contains all important code blocks Missing some code blocks Missing some input and output parameters Easy to read and without mistakes.	Contains all code blocks Contains all input and output variables or links to them Easy to read	Contains all code blocks and input and output variables or links to them Consistent with text Can be used by outsider to develop the algorithm
Analytical model 15%	No check of the correctness of the analytical model No description of the assumptions underlying the analytical model	Description of how the analytical model could be checked, but not actual check / wrong or incomplete check of the model. Limited or wrong description of the assumptions underlying the analytical model	Description of how the analytical model could be checked, and or a limited check. Some underlying assumptions have been described with no real insight on their effect.	The analytical model has been checked and proven to be correct for one load case The underlying assumptions have been described and limited insight is given in their effect	The analytical model has been checked and proven to be correct for more than one load case The underlying assumptions have been described and some insight is given in their effect	The analytical model has been thoroughly checked for all load cases and was proven to be correct The underlying assumptions and their expected effect have been clearly described
Numerical model 25%	Assumptions and effects missing Equations missing Method missing	Missing main assumptions or wrong assumptions mentioned Effects of main assumptions partly missing or wrong Irrelevant numerical method used or mistakes in equations used	Main assumptions are given Effects of assumptions are given, but no motivation of their possible effect on results Relevant numerical method used, but some mistakes in equations used	Main and some secondary assumptions are given Effects of all assumptions are included Motivation of their possible effects on results is given Relevant numerical method used, with few mistakes and some motivation	All assumptions are given Effects are described Motivation for the effects on results is given Relevant numerical method used, no mistakes made and with good motivation	All assumptions that can be expected. Effect on results and motivation show creativity beyond what can be expected. Relevant numerical method used, no mistakes made and

						with very good motivation as in a textbook
Verification 20%	No unit tests No larger (system) tests No motivation for why these tests are sufficient. No description of the accuracy of the tests No plan for addressing discrepancies	One unit test given Proposed larger (system) test wrong or incomplete No motivation for why these tests are sufficient Accuracy of at least one test given.	Several unit tests proposed, but with mistakes Proposed larger (system) test relevant but with mistakes Accuracy of tests given, but with mistakes Tests do not cover the entire model.	Several unit tests proposed. Proposed larger (system) tests relevant Accuracy of tests given with some motivation Tests cover the entire model but no motivation.	Several unit tests are proposed and well described Proposed larger (system) tests relevant and well described Accuracy of tests given and motivated Effort is made to show that tests cover the entire model	Proposed unit tests good, creativity shown in finding tests Proposed larger tests are relevant, creativity shown in designing tests Accuracy of tests given and motivated as in a textbook Tests are shown to cover the entire model
Validation 15%	Validation tests missing No plan for assessing/addressing potential discrepancies	Proposed validation tests wrong or incomplete Insufficient plan for assessing/addressing discrepancies	Proposed validation tests sufficient, but with some errors or missing description Plan for assessing/addressing discrepancies but some mistakes	Proposed validation tests more than sufficient, room for improvement in description Sufficient plan for assessing/addressing discrepancies. Effort is made to relate it to assumptions and data	Proposed validation tests good, well described Good plan for assessing/addressing discrepancies that is related to assumptions and data	Proposed validation tests good, creativity shown, very well described. Plan for assessing/addressing discrepancies is consistent with description of assumptions and their effects, and the validation data