

Engn 379: Capstone Design II (winter 2021)

Technical Design Review Rubric

Design Details and Rationale				
Description of design details	Presented current design in complete and rigorous detail	Presented current design in coherent fashion but some details missing	Presented current design but important details were missing	Failed to adequately describe current design
Rationale for design decisions	Justified design decisions based upon detailed technical merit.	Justified design decisions but some details of technical merit were missing.	Justified design decisions but technical merit was lacking.	Failed to justify design decisions.
Application of quantitative engineering analysis	Accurately applied relevant quantitative engineering analysis with appropriate rigor.	Applied relevant quantitative engineering analysis with appropriate rigor.	Applied relevant quantitative engineering analysis, but rigor was lacking.	Failed to apply relevant quantitative engineering analysis.
Testing and Evaluation: Procedures, Analysis, and Interpretation				
Empirical testing methods (completed or proposed)	Designed and implemented appropriate empirical methods to fully characterize system behavior in complete technical detail.	Designed and implemented appropriate empirical methods to characterize most aspects of system behavior with some missing technical details.	Designed and implemented appropriate empirical methods to characterize some aspects of system behavior but technical details for others were insufficient.	Failed to design and implement empirical methods to characterize system behavior.

Analysis and Interpretation of empirical methods	Appropriately analyzed and interpreted results of engineering tests and/or experiments in complete technical detail	Analyzed and interpreted results of engineering tests with some technical detail missing	Insufficiently analyzed and interpreted results of engineering tests but technical detail	Failed to present the results and analysis of engineering tests and experiments.
Project Management				
Projected timeline	Provided detailed timeline for sufficiently completing all remaining aspects of the project	Provided an appropriate timeline for project completion but some details were missing.	Provided a timeline but some major way points toward project completion were missing	Failed to provide a timeline for project completion.
Projected cost analysis	Provided an appropriate projected cost of the engineering design process and final design solution in complete technical detail	Provided an appropriate projected cost of the engineering design process and final design solution with some missing technical details.	Provided an appropriate projected cost of the engineering design process and final design solution but technical detail was lacking.	Failed to provide an appropriate projected cost of the engineering design process and final design solution

Presentation			
	Excellent	Good	Needs Work
Clearly presented the technical aspects			
Concisely presented the technical aspects			
Presented for a person trained in the field of engineering			
Team presented and conducted themselves in a professional manner			
Graphics and figures professionally polished and used effectively			
Team was well prepared to answer questions, fielded them appropriately, and offered relevant and succinct answers			

Comments: