Steps in the Engineering Design Process - Assessment Rubric				
	Literal	**Developed**	**In-depth**	**Sophisticated**
Step 1: Identify the need or problem	Limited perspective, many inaccuracies	Generally accurate assessment, but lacks perspective and/or accurate supportive information	Accurate and generally revealing, but needs more perspective from differing points of view	Clearly and accurately identifies problem verified by using differing perspectives
Step 2: Research the need or problem	Limited examination of the current state of the issue and current solutions	Generally accurate assessment, but lacks perspective and/or accurate supportive information	Thorough and accurate assessment, but needs more supportive evidence	Thorouh and accurate assessment supported with strong evidence
Step 3: Develop possible solutions	Limited perspective and limited academic disciplines explored	Limited brainstorming for possible solutions, and consideration of math or science	Good solution(s) and articulation of solution(s) in 2-3 dimensions, some use of math and science	Refined possible solution(s),articulated best solution in 2-3 dimensions,meaning-ful use of math and science
Step 4: Select the best possible solutions	Unclear about the relationship between the original requirements and the solutions	Clear understanding of the problem and the solutions, but insufficient data to determine the best solution	Good hypothesis, but lacks enough evidence even though data is extensive	Determination of best solution verified by evidence, trial and/or argument in relation to the original requirements
Step 5: Construct a prototype	Solutions remain in abstraction	Solution(s) can be modeled in limited dimensions	Good solution(s),but they are unable to be modeled in 2-3 dimensions	The selected solution(s) can be modeled in 2-3 dimensions
Step 6: Test and evaluate solution(s)	The prototype meets none of the original design constraints	The prototype meets some of the original design constraints	The prototype meets most of the original design constraints	The prototype meets the original design constraints
Step 7: Communicate the solution(s)	Weak presentation of how the solution best meets the needs of the problem, no inclusion of societal impact	Fair presentation of how the solution best meets the needs of the problem, some inclusion of societal impact	Good presentation and discussion of how the solution best meets the needs of the problem, societal impact and trade-offs	Excellent engineering presentation including discussion of prototype, societal impact and trade-offs
Step 8: Redesign	No revision, and/or little or no information	Incomplete revision, little information	Good revision, needs more information	Excellent revision based on information gathered during the tests and presentation