Engineering Process Rubrics

	1 No Evidence	2 Basic	3 Proficient	4 Advanced
Defining the Problem—Students can identify the teams/partnership's goal for completing the design/prototype.	There is no evidence that the student can identify the problem.	Student needs help to answer the questions: What is the problem or need? Who has the problem or need? Why is it important to solve? .	Student can identify and answer all the questions from Score 2.	Along with 3, student actively looks for and suggests ways to identify the goal to help support team-mates struggling with identifying the problem or answering the questions.

	1 No Evidence	2 Basic	3 Proficient	4 Advanced
Brainstorming—Students work as a team/partnership to brainstorm/mind map several designs.	There is no evidence the brainstorm handout is complete.	Student needs help to put their ideas down onto paper.	Student completed a mind map.	Pre-planning may include several ideas that were well thought out and ingenuity.

	1 No Evidence	2 Basic	3 Proficient	4 Advanced
Build—Students build a model/prototype of the selected design.	There is no evidence the assigned team task is complete for the team prototype.	Student cannot complete assigned task for team prototype on time.	Student can complete assigned task on time.	Along with 3, student actively looks for and suggests ways to help support team-mates struggling with completing their assigned task.

	1 No Evidence	2 Basic	3 Proficient	4 Advanced
Observation (Test and Evaluation)— Students test and evaluate the built model/prototype and observe how it works to improve the design.	There is no evidence the observation data sheet is complete.	Student needs help in putting a solution to the prototype down on paper.	Along with Score 2, there is at least one suggestion for improvement to the prototype.	Along with 3, student may actively suggests multiple solutions and ways to improve the prototype.

	1 No Evidence	2 Basic	3 Proficient	4 Advanced
Redesign— Students make modifications to the existing design to improve the design.	There is no evidence the student assisted in fixing a problem with the prototype.	Student needed help to fix the prototype.	Student can fix the prototype.	Along with 3, student may actively look for and suggest multiple ways to fix the prototype.

	1 No Evidence	2 Basic	3 Proficient	4 Advanced
Test Final Project for Success— Students test and evaluate the built model/prototype and observe how it works to improve the design until the is success.	There is no evidence the student re-tested the prototype.	The student needs help in re-testing the prototype and completing the observation data sheet.	Student can test and complete data sheet for re-testing the prototype.	Along with 3, student may actively look for ways to support other team-mates re-testing the prototype.

	1 No Evidence	2 Basic	3 Proficient	4 Advanced
Reflection and Share	There is no evidence the reflection sheet is complete.	The reflection sheet lists less than five challenges. The list is in bulleted form.	Reflection sheet is complete using complete sentences and provides an example for each five challenges.	Along with Score 3, student may provide ways to use the design outside the classroom.