Engineering Design Level 1

Complete all tasks and review with a mentor.

Participant Resource Sheet



Description: Problem solving is part of the engineering design process. For the Level 1 badge, the participant will understand how the iterative design process works. Complete all tasks to earn the Level 1 badge. The engineering challenge is determined by the team mentors and should be related to the FRC game challenge (current or historical). It is recommended to use an Engineering Notebook. Mentors will certify the participant knowledge using the spreadsheet located in the Mentor Resources tab.

	Task	Mentor Sign and Date
Identify Challenge	Describe where to find size and weight requirements for the current season.	
Iteration	Given a design challenge, the student applies most steps in the design process with minimal prompting.	
Brainstorming	Given a design challenge, the student develops one or two similar ideas.	
Concept Analysis	Student evaluates an idea by simply stating it will or won't work.	
Game	Walks through the game defining actions the robot will perform.	
Calculations	Determine and describe simple machines needed to perform tasks	
Badge Completed Da	ite:	