

**Team: \_P17665\_      Engineer: Brian Coren\_\_\_\_\_**

**Entering Phase: System Design**

**What do I plan on doing to ensure that Team P17665 has a successful System Design review?**

1. Link key ER and CR to benchmarked qualities of materials, cost, and previous studies to prepare for review with team on Sunday (9/11) 3 hr (9/9)
2. With this new updated benchmark comparing models, assumptions and test plans from provided research (and my own) I need to start organizing the key functions to model our project for designing the sensor housing, tolerances, material life, and material strength. 2 hr (9/10)
3. Work on the functional analysis and Concept Generation & Morphological Table based off of benchmarking for the housing and stuff. (9/11) 2hr
4. Using new benchmarked catalog of materials, create table of alternatives. 1 hr (9/13)
5. Refine the benchmarked catalog of materials with peer review from team mates/guides (and customer, maybe). This needs to cover all of concepts of development and alternatives (will help flush out options) 2 hr (9/14)
6. Make the selection, do the math for the system strength, review with process engineer (Elbert) on the best way to attach the device to the shaft of the tool bit. (9/16) 2 hr.
7. Design the part and model it in ANSYS or MatLab (proof of concept) (9/19-9/22) 3 hr
8. Begin prototyping our design, refine housing specs and other stuff (9/23) 2 hr

**You will answer these three questions when you submit at the end of System Design Phase.**

1. What did I actually do?
2. What did I learn?
3. What do I plan on doing to ensure that Team P16xxx has a successful Phase (N+1) review?