

## Engineering Design

### Six Months

### Four Months

### Two Months

<b>STEP 1</b> Select a Topic	Choose a topic that you and your team would like to investigate	Week 1	Week 1	Week 1
<b>STEP 2</b> Identify a Problem	Choose a problem that faces your community and conforms to the topic you've chosen. Be sure to identify how solving this problem will help your community, and what parts of the community it will directly impact.	Weeks 2-3	Weeks 2-3	Week 2
<b>STEP 3</b> Research the Problem	Using at least ten reputable sources, research the problem you have chosen so that you have background information before you begin your design.	Weeks 4-7	Weeks 4-5	Week 3
<b>STEP 4</b> Identify the Criteria and Constraints for the Design	Using your research determine what your design needs to have and what it should not have.	Weeks 8-9	Weeks 6-7	Week 4
<b>STEP 5</b> Build a Prototype	Based on your ideas for the design, build a prototype of your design.	Weeks 10-15	Weeks 8-11	Weeks 5-6
<b>STEP 6</b> Test the Prototype	Test your prototype to see if it can work.	Weeks 16-21	Weeks 12-14	Week 7
<b>STEP 7</b> Construct a Conclusion	Based on your tests on your prototype construct a conclusion that explains whether your design will work or not and why.	Weeks 22-24	Weeks 15-16	Week 8