Research Plan – Engineering / Software Project

**Title**

**Rationale (Problem)**

A few sentences explaining why you are doing the research and background information on it.  
- Is there a problem you are trying to solve

- Why is it interesting to you.  
- Why is it important or should others care about the research.

**Engineering Goal**

Describe what you will be building to solve the problem.

**Design Criteria**

What are the specific functions that must be met to satisfy your engineering goal.

The design criteria are what guides the decisions when designing the prototypes.

The design criteria should be testable or measurable.

**Materials and Tools**

What do you need to build your prototype /s and test them. Include software tools and programs.

**Prototype Design + Build**

How will you design and build your prototype /s?

Are there any safety precautions with tools or processes?

**Prototype Testing + Measurements**

How are you going to test your prototype?

What are you going to measure when testing your prototype? What equipment is needed?

Where are you recording and storing data?

Test to your ***Design Criteria***

**Human Test Subjects**

1. How will they test your prototype?
2. How will you recruit your participants? Others or just yourself?
3. Risk assessment – Are there any risks to the participants (physical, psychological, time involvement, social, legal, etc.)? How will you minimize risk? Are there any benefits to the participants?
4. Protection of Privacy – Will identifiable information be collected? Will data be anonymous and how will anonymity be protected? It not anonymous, will data be confidential and how will confidentiality be safeguarded?

**Data Analysis**

Include a description of the techniques or statistical tests that will be employed to analyze the results of the experimentation.

**Bibliography**

Sources on your topic.