Research Plan Template

Engineering Project

**Title**

**Rationale (Problem)**

A few sentences explaining the global or societal need for this research. Why would anyone be willing to fund this research in the real world of science?

**Engineering Goal**

Described what is that you hope to develop. Be specific. Describe in simple terms, the hoped-for outcome.

**Procedure**

Sequentially numbered steps that cover the procedure from beginning to end. The steps should be detailed enough for someone else to be able to replicate the study from your steps. This section can be sub-divided by different sections of the procedure such as safety, experimentation, data analysis, disposal, etc.

**Safety**: These steps will vary according to the types of projects. These steps must be a part of the research plan as well as being on the Form 3. Some examples are:

**Hazardous chemicals or devices**: Safety equipment used, including, but not limited to, (goggles, gloves, closed toe shoes), working conditions (fume hood, etc), fire extinguisher if combustion is possible.

**Experimentation:**

These sequential, numbered steps should continue from safety. This must thoroughly cover the entire study. Make sure to include the experimental design and data collection procedures.

Include only the parts of the project that you specifically did. Do not include parts that were completed by your mentor.

**Data Analysis:**

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

**Disposal**

This is necessary for PHBAs, chemicals or materials that require special handling for disposals.

**Summary or addendum**

Necessary if experimentation changed through the course of the research. If additional SRC or IRB approval was needed, you must also provide a letter from the SRC, explaining the changes which is signed and dated. If new IRB approval was necessary, the new Form 4 and informed consents must be included with the paperwork.

**Bibliography**

Current journal sources on your topic from your literature review.