

Project Number:

## **Judging Criteria for Engineering Projects**

### **I. Research Problem (10 pts)**

\_\_\_ description of a practical need or problem to be solved

\_\_\_ definition of criteria for proposed solution

\_\_\_ explanation of constraints

### **II. Design and Methodology (15 pts)**

\_\_\_ exploration of alternatives to answer need or problem

\_\_\_ identification of a solution

\_\_\_ development of a prototype/model

### **III. Execution: Construction and Testing(20 pts)**

\_\_\_ prototype demonstrates intended design

\_\_\_ prototype has been tested in multiple conditions/trials

\_\_\_ prototype demonstrates engineering skill and completeness

### **IV. Creativity (20 pts)**

\_\_\_ project demonstrates significant creativity in one or more of the above criteria

### **V. Presentation (35 pts)**

#### **a. Poster (10 pts)**

\_\_\_ logical organization of material

\_\_\_ clarity of graphics and legends

\_\_\_ supporting documentation displayed

b. Interview (25 pts)

- \_\_\_ clear, concise, thoughtful responses to questions
- \_\_\_ understanding of basic science relevant to project
- \_\_\_ understanding interpretation and limitations of results and conclusions
- \_ degree of independence in conducting project
- \_\_\_ recognition of potential impact in science, society and/or economics
- \_\_\_ quality of ideas for further research
- \_\_\_ for team projects, contributions to and understanding of project by all members