

# **Judging Criteria for Engineering Projects**

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

- \_\_\_ description of a practical need or problem to be solved (3)
- \_\_\_ definition of criteria for proposed solution (3)
- \_\_\_ explanation of constraints (4)

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

- \_\_\_ exploration of alternatives to answer need or problem (5)
- \_\_\_ identification of a solution (5)
- \_\_\_ development of a prototype/model (5)

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

- \_\_\_ prototype demonstrates intended design (7)
- \_\_\_ prototype has been tested in multiple conditions/trials (7)
- \_\_\_ prototype demonstrates engineering skill and completeness (6)

## **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 (3)
- \_\_\_ clarity of graphics and legends (4)
- \_\_\_ supporting documentation displayed (3)

### **b. Interview (25 pts)**

- \_\_\_ clear, concise, thoughtful responses to questions (4)
- \_\_\_ understanding of basic science relevant to project (4)
- \_\_\_ understanding interpretation and limitations of results and conclusions (4)
- \_\_\_ degree of independence in conducting project (4)
- \_\_\_ recognition of potential impact in science, society and/or economics (4)
- \_\_\_ quality of ideas for further research (4 or 5)
- \_\_\_ for team projects, contributions to and understanding of project by all members (1)