
Junior Design

Regina Engineering Competition

Team Composition

The Junior Design team must be comprised of a maximum of four competitors. The design team must be entirely comprised of students enrolled in their 1st or 2nd year of the Faculty of Engineering at the University of Regina.

Procedure

1. Presentation of Problem

The problem must be presented to all competitors and judges at the beginning of the competition. The competition director must provide detailed explanations of what is expected from the competitors, both orally and in writing.

Competitors have fifteen (15) minutes to ask the competition director any questions they may have. This takes place during the competition briefing, after the presentation of the problem.

2. Development of the Solution

The teams will have three to four (3 - 4) hours to develop their solution, produce all required deliverables, and prepare their presentation for the judges. All the deliverables must be submitted to the competition director before the allotted time expires. Competitors may finish before the end of the allotted time.

3. Presentation and Tests

Competitors have five (5) minutes to present their designs. All team members must be present and participate in the presentation or be penalized by the judges. The original design, its rationale, a description of the design process, and a critique of the prototype must be presented. The judges then have a maximum of five (5) minutes to ask questions. Each team will then carry out a set number of tests of their design.

Each team will then carry out a set number of tests of their design. The number and length of tests during the presentation of the problem. The testing may be carried out directly after each team's presentation or after all presentations are complete, at the discretion of the organizer.

Deliverables

Each team is required to submit a prototype of their design before the end of the design period. The requirements of the presentation and design will be outlined in the problem design package.

Team #0

Team Member #1

Team Member #2

Team Member #3

Team Member #4

Overview

This competition challenges junior engineering students to design and build a prototype to address a technical problem. The Junior Team Design category is similar to the Senior Team Design competition, but emphasis is placed on prototype functionality rather than design theory.

Resources

Facilities Required

- 1 amphitheater (presentations)
- 1 workroom per team (design)
- 1 competition/testing space

Equipment Provided

During Design

- Materials and/or tools specific to the design problem
- Digital storage to submit presentation

During Presentation

- White board(s) or blackboards

Allowed External Resources

- No external resources are allowed for the Junior Team Design competition.

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Assessment and Judging

- The panel must have an odd number of judges.
- The panel must a minimum of three (3) judges.
- The assessment shall be carried out in the audience's presence.

Judging Matrix

| | | |
|--|-------------|----------------------|
| Presentation | 20% | <input type="text"/> |
| Design process | | |
| Design justification | | |
| Presentation delivery | | |
| Design Quality | 45% | <input type="text"/> |
| Design compliance with expectations | | |
| Technical innovation and creativity | | |
| Abides to the spirit of the competition | | |
| Testing | 35% | <input type="text"/> |
| Quantifies score including time, quantity and cost consideration | | |
| Total | 100% | <input type="text"/> |

Judge's Name.....

Notes
