Category Objective:
Overcome a technical challenge.

Team Size:
Teams in the category may have up to four people per team. A team may choose to compete with less than four group members.

Facilities:
• 1 amphitheatre (presentation of problem and prototype testing)
• 1 workroom per team (design of the solution)

Equipment Required:
• All materials will be provided at the beginning of competition
• Students are allowed to bring their own laptops and will have access to a computer laboratory.
• Software: Any software brought by students on a laptop is acceptable

Procedure:
1. Presentation of Problem
The problem will be presented to all competitors and judges at the beginning of the day of competition. The category official must provide detailed explanations of what is expected from the competitors, both orally and in writing. All required material, equipment and tools will be provided at this time.

2. Question Period
The teams will then have a shared period to ask the category official questions.

3. Development of the Solution
The teams then have 4 hours to develop their solution, produce all required deliverables, and prepare their presentation for the judges. All the deliverables must be handed in to the official or his/her designates before the end of the allotted time. Competitors may finish before the end of the allotted time.

There will be a ‘store’ where teams can ‘purchase’ supplies for their prototype (with an imaginary budget). These are the only supplies allowed to be used for the prototype (ie. extra materials cannot be brought to the competition).

4. Presentation and Trials
Competitors have a limited time to present their prototype, including the design rationale and a description of the design process. The teams then carry out a test for their prototype. Judges may ask questions.

5. Scoring
A team’s score will be based on a combination of their prototype testing results, the judges scoring and other factors specific to the challenge.