AUB Robotics Club

Engineering Design Challenge

Engineering Design Challenge 2.0

Drive Smarter

Technical Judging Outline

Technical Assessment

Technical Assessment (10%)

How well does the car perform? How professional was our work?

High-score Characteristics

- Effective design characteristics
- Robust design; not fragile
- Well-executed manufacturing

Low-score Characteristics

- Incoherent design
- Ineffective design characteristics
- Poor quality or fragile final car

Cost Effectiveness

Cost Effectiveness (10%)

To what extent were we smart in spending money? Did we try and minimize our car's cost?

High-score Characteristics

- Inexpensive components or materials
- No unjustified redundancy
- Cost overview with justifications

Low-score Characteristics

- Unjustified use of expensive components
- Redundant parts

Design Process

Design Process (10%)

Can we present design alternatives and justify choice/solutions? What did we base our work on?

High-score Characteristics

- Consideration for more than one design
- Justification for tradeoffs
- Scientific approach to solving challenges

Low-score Characteristics

- Lack of design alternatives
- Final design is not well-studied
- Ignorance of strong/weak points

Creativity & Originality

Creativity & Originality (10%)

Did we build it ourselves/used something in an unexpected way? Did we come up with a new way to do things?

High-score Characteristics

- Building a car from scratch (manually or using CAD/CAM); or using unexpected components or materials
- Original ideas, methods, and concepts

Low-score Characteristics

- Using a ready-made car without noticeable changes
- Sticking to traditional methods without consideration for alternatives