



Herff College of Engineering EDAY 2019
Egg Drop
Grades 5-12

Rules and Regulations

Objective: To design an Egg Transport Vehicle (ETV) to convey uncooked eggs from a 1st floor landing to the ground (approximately 15ft).

Team: Teams may consist of up to 5 students.

Apparatus: Each ETV must meet the following specifications:

Size/Mass: The ETV must be able to fit inside a volume that is in the shape of a rectangular box with the dimensions: 25cm x 25cm x 50cm and weigh no more than 2.72 kg (5 pounds).

Materials: The vehicle must be constructed entirely out of one or more of the following materials: wood, metal, cloth, rubber, paper, string, feathers, glue, and cardboard.

The following are not allowed: plastics, Styrofoam, balloons, or other synthetic packaging materials.

Competition:

1. Each entry will be qualified permitting the requirements for size and materials mentioned above are met. Projects that exhibit high creativity and unusual tactics are encouraged. The mass of each entry will also be recorded.
2. Eggs will be supplied to the contestants at the time of the contest. Building materials and practice eggs will not be provided.

3. The ETV, with egg, will be dropped by an independent adjudicator from a 1st floor landing to the marked landing zone on the ground floor.

Scoring:

1. Immediately after a drop, both the egg and the ETV will be submitted to the contest judge. Each egg will be judged as undamaged or damaged (contains visible cracks or worse). If the egg is damaged, the score for the ETV will be zero.
2. For those ETVs with undamaged eggs, a score will be assigned as follows:
SCORE = x1 + x2
X1 = 10 x (Mass of ETV in grams)
X2 = 100 x (Number of different materials used in design)
3. The best design will be judged to be the one with the lowest score.