# MEA CAD Competition 2021 SOLID EDGE

#### Organized by MEA in collaboration with SIEMENS Digital Industries

Challenge aimed at getting students more involved with CAD design.

This is your opportunity to ignore the technical rules and regulations and design something truly unique and fun.

### **GUIDELINES**

All the undergraduate students of the University of Peradeniya are eligible to participate in the competition.

The design should be under the theme of "Toys".

The toy should be for the age group 3-8 years old.

It should be operatable with moving parts, and a working mechanism (you can use standard parts like nuts, bolts, engines, etc.).

The toy should be designed in a way that it could be manufactured and assembled.

The design should be an original concept of the contestant. Re-use of an exact model in use may lead your entry to disqualify.

A successful entry should consist of 4 parts:

- 1. CAD model
- 2. Keyshot rendered images
- 3. An animation / video of the model
- 4. Presentation video by the contestant of not more than 2 minutes

The competition is consisting of 2 phases. The contestants have to submit their initial designs in the  $1^{st}$  phase. The shortlisted outstanding designs will be directed to the  $2^{nd}$  phase where they have to modify their initial designs.

In the 2<sup>nd</sup> phase, a time duration of 3 hours will be given to come up with a modification to the submitted entry in the 1<sup>st</sup> phase (a common modification will be given to all the contestants).

This will be followed by an interactive session where each candidate will present their design to the panel of judges in not more than 2 minutes.

No contestant should publish their designs before MEA CAD Competition team publishes the design in its social media platform. Doing so may lead your entry to disqualify in case of a complain.

After being published by MEA CAD Competition team, if a 3<sup>rd</sup> party claims copyright for your design, there will be an inquiry and the team's decision will be the final on legitimacy of the claim.

The judges' decision will be the final.

The submission deadline is due at midnight of July 11<sup>th</sup>, 2021 (12.00 AM).

#### **Software**

All the designs should be done using Solid Edge, by the participants themselves.

The Student Version of the software can be downloaded using the link below.

Link:

https://www.plm.automation.siemens.com/plmapp/education/solid-edge/en\_us/free-software/student

A Solid Edge workshop will be conducted for all the participants to get familiarized with the software.

#### **Evaluation**

Evaluation criteria is as follows:

- 1. Innovative concept
- 2. Design complexity
- 3. Appearance
- 4. Manufacturability

## Competition

Out of the entries, the outstanding designs will be short-listed, and out of the short-listed designs, one top design will be selected by a panel of judges consisting of representatives from DMIE and PANACEA Solutions.

The winner stands a chance to win a **3D Connexion's Wireless SpaceMouse**.

1<sup>st</sup> runners up stand to win a cash price of **Rs.15,000**.

2<sup>nd</sup> runners up stand to win a cash price of **Rs. 7,500**.

Merit certificates will be awarded to all the outstanding designs, and all the participants will be awarded with a certificate of participation.