

Rules and Regulations

1. Each Team Should consist of 3 to 4 Participants.
2. The design specifications, including overall dimensions, loading conditions, mounting requirements and evaluation criteria, will be provided by the organizers 2 days before the event.
3. Teams must develop their own L-bracket concept and CAD model according to the specified requirements. Copying or reproducing another team's design will lead to immediate disqualification.
4. Teams may use any CAD software, engineering calculations, and/or FEA to develop, validate and optimize their designs.
5. Teams must prepare and present their design and FEA simulations to the organizers before the event for evaluation .
6. Each team must give a brief technical presentation explaining their L-bracket design, material utilization, design optimization, structural concept, and the engineering analysis/FEA used to validate the design.
7. Teams must submit the original CAD file of their L-bracket design and the complete FEA simulation file & results within the prescribed submission timing. The FEA submission must contain proper relevant simulation data, including material properties, loads/boundary conditions, mesh information, stress and deformation results.
8. The submitted design will be evaluated by the organizers before 3D printing. Only approved designs will proceed to 3D printing. Designs violating dimensional or mounting constraints, exceeding the prescribed weight limit, or unable to reasonably withstand the prescribed load will be disqualified.
9. Only approved designs will proceed to physical testing. The printed bracket will be evaluated for applied load, deflection, failure load, permanent deformation .
10. Use of AI CAD Software is prohibited.
11. Each team will be evaluated based on their 3D Model, Quality of the 3D print, validation made from analysis and calculation, understanding and interpretation of the given problem, presentation/FEA, and performance during the test.