



Learn Beyond

(Autonomous, Affiliated to Anna University)

**KPR Institute of
Engineering and
Technology**



IEEE
Robotics &
Automation
Society
KPRIET SBC



Connecting the Mobile World
KPRIET SBC

MI QUINIX

Mechatronics Student Association

—  — **chakravyuha** —  —

CAD MODELLING

Basic Guideline:

- Individual participation only.

Time Allocation:

- Total of 3 rounds will be conducted.
- 30 minutes per round.

Event Format:

Round 1: 2D Drafting Challenge

- A moderate 2D isometric view and 2D drawing will be provided.
- Participants must complete the task within 30 minutes.
- Evaluation will be based on accuracy, quality, and completeness of the drawing.
- The first 10–20 participants to successfully finish will qualify for the next round.

Round 2: 3D Modelling Challenge

- A 3D component/object drawing will be provided.
- Participants must create the CAD model within the given time.
- The first 10 participants who complete with quality output will qualify for the final round.

Round 3: Advanced Modelling & Design

- A complex 3D assembly/object will be given.
- Finalists must complete the task within 30 minutes.
- Evaluation will be based on design accuracy, surface finish, constraints applied, and innovation in modelling approach.
- Winners will be decided from this round.

Event Protocol:

- Participants must report at the venue at least 10 minutes before the scheduled time.
- Late reporting will lead to disqualification.
- Participants are encouraged to bring their own laptops with licensed CAD software installed for convenience.
- Preferred software: SolidWorks and Fusion 360 (other standard CAD software may also be used).
- Institute systems with CAD software will also be provided, but prior information will be given before.
- No external storage devices or internet access will be allowed.
- Any form of malpractice will result in immediate disqualification.

Evaluation and Jury Decisions:

Technical Aspect

- Accuracy of Drawings/Models
- Speed of Completion
- Completeness of Features/Constraints Applied
- Surface Finish & Detailing

Overall Assessment

- Balanced consideration will be given to speed, precision, and creativity in CAD modelling.
- The jury's decision will be final and binding.