**GMR INSTITUTE OF TECHNOLOGY, RAJAM**

(An Autonomous Institution, Accredited by NBA of AICTE, NAAC of UGC & an ISO 9001:2015 Institution)

**Standard Operating Procedure (SOP)**

Name of the Event: CADathon

Duration of Event: 8 hours

Expected No of Registrations: 50 teams

Date of the Event: - 16-02-2024

Event timings: - 10 pm to 6 am

Team size: - 3-4 members

About the Event:

An exhilarating design challenge that invites creative minds to push the boundaries of design using Computer-Aided Design (CAD) software. The CADathon is a design competition that challenges participants to transform innovative ideas into functional designs. In this event, you'll have the opportunity to tackle diverse design challenges across various fields. You can choose to participate as part of a team to take on complex designs.

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| Venue | Duration | Faculty Coordinator | Student Coordinator |
| CBT Lab/ CAD Lab | 8 Hours | Mr. G. Sasidhar  Dr. Bappa Mondal | D. Sri Veda  J. Harika  D.V.M.S. Vignesh |

Guidelines of the Event:

Round 1: -

* The quiz will be conducted on the CAD (Computer Aided Design) and Design industry.
* The duration of this round will be one and a half hours (10:00 pm to 11:30 pm).

Round 2: -

* We will provide a live object they need to measure the dimensions and draw the orthographic projections of the given object.
* They need to generate the individual parts in a 3D modelling software.
* And they need to assemble the individual parts in 3D software.
* The duration of this round will be 3 hours (11:30 pm to 2:30 am).

Round 3: -

* The participants are instructed to extract the IGES (Initial Graphics Exchange Specification) format of the already assembled parts in an analysis software of their choice.
* They need to do structural and thermal analysis of already assembled parts of their choice.
* They need to provide a detailed formulation of a manufacturing process plan for the parts.
* They are required to develop an FMEA (Failure Mode and Effects Analysis) for both DFMEA (Design Failure Mode and Effects Analysis) and PFMEA (Process Failure Mode and Effects Analysis) and suggest possible corrective actions.
* The duration of this round will be 3 hours (3:00 am to 6:00 am)

1. Each round will be evaluated by the judges.
2. Participants can bring their laptops.
3. Only one computer or laptop will be allowed for the participants.

Budget:

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| Event | Registration fee | Snacks and Goodies | Prize money |
| CADathon | 1000/- | 7,500/- | 1st Prize- 10,000/-  2nd Prize- 7,500/- |

Signature of Faculty Signature of the Central Signature of the

Coordinator ISTE coordinator HOD

Signature of the Associate Dean

(Student Affairs)