
❖ Students can enrol in any number of events.

❖ Evaluation will be based on novelty, originality, societal impact, simple approach, involvement in a team.

❖ Registered Contestants are expected to abide the rules & regulations, follow the decorum.

❖ Only the registered contestants are permitted to be present at the venue.

❖ They are expected to bring their own materials required for the event; however space, electrical connection, wooden table will be provided to showcase their models. They may prepare a PowerPoint presentation.

❖ They are advised to report to the venue atleast one hour before the event.

❖ Decision of the jury is final and binding.
## RULES FOR INDIVIDUAL EVENTS

<table>
<thead>
<tr>
<th>S.NO</th>
<th>EVENT</th>
<th>ABOUT THE EVENT</th>
<th>RULES</th>
<th>JUDGES</th>
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</table>
| 1    | HYRAULIC ROBO DESIGN         | Designing of robots or robotic parts with the help of hydraulics (liquids under confined pressure) | • Team/individual participation  
• Minimum one degree of motion achievement  
• Fluid medium should be water  
• No pneumatic/pressure will be provided  
• Wheel/legged robot only | Prof. Dr. S. PRAKASH (Dean / School of Mech)  
9940390301  
Er. DURAI RAJ (Mech)  
73055533500 |
| 2    | SENSOR DESIGN                | Design of sensor                                                                | • Individual/group of 3 members  
• Any working simulation model  
• Fully hardware/fully software/combination of hardware & software  
• Maximum types of sensors – three different types may be used.  
• Any coding/interconnection must be thoroughly explained | Mr. N. HARI PRASAD (ETCE)  
9444782445  
nhetce@gmail.com |
| 3    | PROTOTYPE SATELLITE DESIGN   | Designing of satellite (prototype)                                              | • Maximum of 4 members in a team.  
• Application oriented prototype is appreciated.  
• Sensors, cameras and flying toys can be used.  
• Design must be an indigenous.  
• Explosive chemicals should not be used.  
• Batteries can be used for demo purpose.  
• Error coding techniques suitable for satellite application. | Mr. Sugadev (EIE)  
9894723072  
sugadev74@gmail.com  
N.R. Krishnamoorthy (EIE)  
9840990206  
moorthy26.82@gmail.com |
|   | MOBILE APP DESIGN | Creating a mobile app | • Member allowed- 2 per team/individual  
• Can develop mobile app using any language  
• Can use any online/android studio/mit/design tool  
• Must explain the concept behind  
• Should know basic computer knowledge in terms of loops, etc., | Mr.Albert Mayan (CSE)  
9445108401  
Ms.Angayargani(CSE)  
9443579393 |
|---|------------------|----------------------|------------------------------------------|----------------------------------|
| 5 | MODELLING AND CODING | MODELLING  
Models are a mentally visual way of linking theory with experiment.  
Coding  
To systematize and arrange (laws and regulations) into a code. | • Member allowed- 3 per team/individual  
• Should complete the model with specific time  
• Model should be in application oriented type  
• Use minimum number of model tree  
• Coding can be of real-time code or pseudo-code or algorithm or flow diagrams.  
• Marks shall be awarded for the concept, expected outcome of the model, depth of knowledge in the coding and model.  
• Requirements shall be informed prior to the venue in-charge or conducting authority. Example, if power is required, it should be informed previously to the coordinators. | Mr.DHAYANANDAN(ETCE)  
dayako001@gmail.com  
Dr.GANESAN (Mech)  
9884617947  
Dr.XAVIER SURESH(Phy)  
8248990723  
xaviersuresh@gmail.com |
| 6 | REVERSE ENGINEERING | Re assembling of product | • Two students per team is allowed  
• Select any device/product to disassemble it (Eg.TV remote control, calculator, flash light etc)  
• Prepare a power point presentation which includes  
➢ Device Description  
➢ Bill of materials  
➢ Sketches of each part | Dr.ANNIE ELISABETH JEBASEELI(EEE)  
9940229023 |
<table>
<thead>
<tr>
<th>No.</th>
<th>Activity</th>
<th>Requirements</th>
<th>Contacts</th>
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<tbody>
<tr>
<td>7</td>
<td>MODELES BASED ON SCIENCE LAWS</td>
<td>Students must create a model based on laws of science</td>
<td>Dr. RAMESH KUMAR (Phy) 9940674748</td>
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<td>• Member allowed- 4 per team/individual</td>
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<td>• Make a model to verify any physics or chemistry related law</td>
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<td>• Write a description and displayed it in front of the model</td>
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<td>• Selection key terms are Experiment, Observations, Scientific methods, hypothesis, Principle, Theory, Model, Scientific law, Universal</td>
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<td>8</td>
<td>SCIENCE IN DAILY LIFE EXPERIMENTS</td>
<td>The students must perform some interesting experiment and must explain the natural phenomena behind it.</td>
<td>Dr. XAVIER SURESH (Phy) 8248990723 <a href="mailto:xaviersuresh@gmail.com">xaviersuresh@gmail.com</a></td>
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<td>• Member allowed- 2 per team/individual</td>
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<td>• Need to explain 3 daily life experiments with the demo and science behind it</td>
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<td>• Perform the experiment using ‘everyday items’ to conduct simple science experiments.</td>
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<td>9</td>
<td>CHEM E CAR</td>
<td>Movement of cars (vehicles) using chemical reactions. Chem E Car competitions are unique in that they are based on accuracy rather than speed. The car must have the ability to travel between 50 and 100 feet and simultaneously house anywhere from 0 to 500 mL of water.</td>
<td>Dr. SHEIK MIDEEN (CHEM) 9444551094</td>
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<td>• Members allowed – individual / 2 per team</td>
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<td>• Highly reactive chemicals are not allowed</td>
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<td>• Results will be declared based on the distance covered.</td>
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<td>• The present competition expects from a student team in designing and constructing a car powered by a chemical energy source that will safely carry a specified load over a given distance and stop.</td>
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<td>• The student team will be asked to</td>
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demonstrate a commitment to safety awareness, safety planning, and safe practices as a standard component of their participation.

- The hydrogen used in vehicles must be generated on-site. Appropriate safety precautions and safe operations must be taken care.
- Filling of gases from a compressed cylinder is prohibited.
- The student team must ensure that they do not use and emit any hazardous materials.

| 10 | CREATIVE WRITING AND REVIEWING | Students must write an article about scientific research and invention | **Book review**
- Individual event
- Title will be given on the spot for the event ‘creative writing.’
- Review material will be provided for the event ‘Reviewing’
- Time limit will be 60 minutes and word limit is 750 words.
- Participants will be judged on Idea Mapping, Writing Skills and Expression

**Film review**
- Express your opinion of the film, but support your criticism. Write about Directors, cinematographers, special effects.
- Time limit will be 60 minutes and word limit is 1000 words.
- Participants will be judged on Idea Mapping,|

Dr. MERCY (Eng)
9941610210
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<th>Writing Skills and Expression.</th>
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<td>• Adjust the style of your review for the readership</td>
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