Loyola-ICAM College of Engineering and Technology (LICET)
Department of Electrical and Electronics Engineering
Electrical Engineers League (EEL)
Under
AICTE – Scheme for Promoting Interests, Creativity and Ethics among Students (SPICES)

Event Report

Category: **Competition**

Title of the Event: **Tech-D-Tests 2022** [A series of Technical Design ConTESTS]
Theme : Product Design Contest

Date: 28-02-2023

Venue: H11 (Fab lab); F01 (Electro. Lab)

Details of Participants

- Total No. of Participants: 51
- Members of EEL: 51 (No. of Teams: 14)

Technological/ Academic/ Other benefits generated by conducting the event with respect to:

(a) the institution	● Networking & building brand recognition - promote the institution and help people connect with our brand ● Showcase the facilities at the institution by bringing the professionals from industries
(b) the faculty	● Provide value to community by taking interest in student's passion and become mentors to students practicing compassion
(c) Students	● Enable students to create and develop innovative engineering applications ● Build competence by providing necessary platform in electrical engineering that will continue to develop the knowledge and skills of students
(d) Industry/ Society	● Clarifying the image of the avenues of development in the near future ● Contributing to make the literacy rate rise higher thereby helping build a more educated, empowered and aware society

Proceedings of the event

Category: Competition

Report on Tech-D-Tests 2022 [A series of Technical Design ConTESTS]

Date: 28-02-2023 Time: 03:00 pm to 04:00 pm Venue: F01 (Lab); F11 (Seminar Hall)

Theme : Product Design Contest

Judge : Dr. S. Prathiba, Prof & Head/EEE
Dr. A. Santhi Mary Antony, AP/EEE, LICET.

Participants : Members of EEL

Commemorating National Science Day, the Department of Electrical and Electronics Engineering and Electrical Engineers League (EEL) under AICTE-Scheme for promoting interests, creativity and ethics among students (SPICES) conducted Product design contest as a part of a series of Technical Design contests for the members of EEL. A total of 51 students participated in the event. During the event, students were were asked to design and develop electrical/ electronic product that would serve as a technical solution to any one of the day-to-day life challenges. The students were also encouraged to fabricate the same using the laboratory infrastructure available within the institution premises.

Students participated with great enthusiasm as they had an opportunity to test the knowledge that they have acquired from learning in theory and doing experiments during practical sessions. The students grouped themselves into teams of size not having more than 4 participants and took part in the competition. The students developed products for alcohol detection, automatic switching of street lights powered by solar energy, All-in-one Solar powered charger for different electronic devices, Smoke/ fire detector, Burglar alarm, Automatic rain detector, Smart fire extinguisher and so on…

The teams were judged based on the following criteria:

- Solution Approach
- Concept
- Adherence to problem statement
- Workability of the design

The judges met the teams one after the other to validate their design. They provided valuable suggestions and guidance to better their design and scored them based on the above criteria. Students found this event to be a great

learning experience and expressed their interests to participate in more events of this kind. They also mentioned that such competitions help in building their knowledge, confidence and also encourages them to take part in similar events conducted at other institutions.

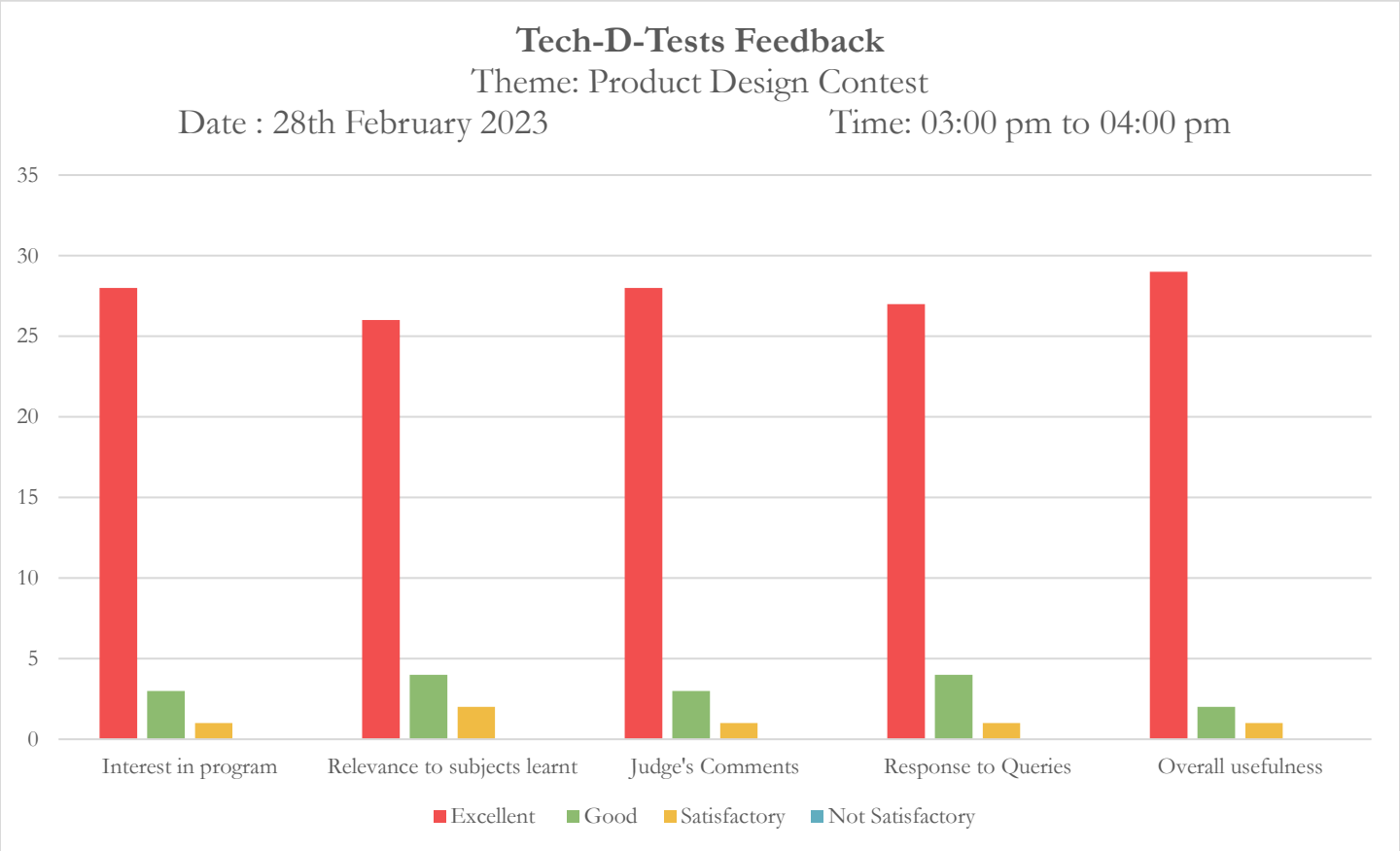
Relevant Courses in the current semester

Electric Circuit Analysis	Electronic Devices and Circuits	Other subjects

Relevant Program Outcomes

- PO3 – Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
- PO5 – Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO6 – The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7 – Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and the need for sustainable development.
- PO8 – Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9 – Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10 – Communication: Communicate effectively on complex engineering activities such as, being able to comprehend and make effective reports and presentations, and give and receive clear instructions.
- PO11 – Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12 – Life-long learning: Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Feedback


Tech-D-Tests Feedback
Theme: Product Design Contest
Date : 28th February 2023
Time: 03:00 pm to 04:00 pm
35
30
25
20
15
10
5
0
Interest in program
Relevance to subjects learnt
Judge's Comments
Response to Queries
Overall usefulness
Excellent
Good
Satisfactory
Not Satisfactory