



# **SOCIETY OF AUTOMOTIVE ENGINEERS**

## **DELHI TECHNOLOGICAL UNIVERSITY**

### **ANNUAL REPORT**

#### **(JANUARY 2022-APRIL 2023)**

SAE DTU, the oldest mechanical based society in Delhi Technological University, works constantly with the aim to give the members an enriching experience with an all-round development in the automotive genre. Be it a hobby or a professional choice, we will help you begin from scratch and learn all that you need, with the proper exposure and guidance to help you realise your aim. The society is inclusive of undergraduate students from multidisciplinary backgrounds working under the guidance of faculty advisors, Dr. Anil Kumar and Dr. Naushad Ansari, Department Mechanical Engineering, Delhi Technological University.

### **GOALS**

1. Encouraging interest in automotive engineering and related fields among students.
2. Providing opportunities for students to learn about and apply principles of automotive engineering through various projects, competitions, and events.
3. Developing practical skills and knowledge in areas such as design, manufacturing, testing, and simulation.
4. Providing networking opportunities for students to connect with industry professionals, alumni, and other students interested in automotive engineering.
5. Promoting teamwork, collaboration, and leadership skills among students
6. Fostering a culture of innovation, creativity, and problem-solving.
7. Providing access to industry-standard tools and equipment for students to use in their projects and research.

Overall, the goals of SAE DTU collegiate group is to provide students with a comprehensive education in automotive engineering, promote professional development, and support the growth of the automotive industry.

## **STUDENT'S COUNCIL 2022-23**

### **President**

Keshav Aggarwal

### **Vice-President**

Rhythm Aggarwal

### **Secretary**

Aryan Nigam

### **Treasurer**

Aryan Gupta

### **Membership Chair**

Harshit Gupta

### **Reception Chair**

Akhil

### **Program Chair**

Shubham Chauhan

### **Publicity Chair**

Nishant

## **Events and Activities planned for rest of the academic year 2022-23**

1. Outreach Program in collaboration with Centre of Extension and Field Outreach, DTU to train students of government school in the robotics and mechatronics domain.
2. Industrial Visits in collaboration with the Department of Mechanical Engineering to various industries in the radius of 100 Kms. from campus.
3. Glider Making Competition, in which teams will be asked to make a glider using dapon sheet and carbon fibre rods to check for most efficient and lightweight glider
4. CAD Crafting Competition: This event is scheduled to be organised after completion of our ongoing Solidworks/CAD Workshop series.
5. Seminars: We have scheduled more Industrial Lectures and seminars to be held under Platinum jubilee lecture series.

## EVENTS CONDUCTED DURING 2022-23



## CAD WORKSHOP

(April 2023)

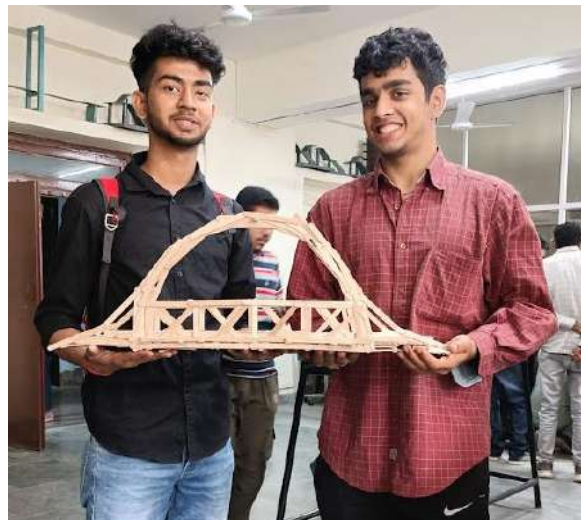
Sae DTU organised a workshop on Computer Aided Design which was a series of few lectures, wherein students were able to improve their skill set learning to work on software like Solidworks which is one of the most popular design and engineering software in the market. They were also able to make a real life project on Solidworks after completion of the series thus helping them gain practical experience of the engineering field.



## COGNIZANCE, IIT ROORKEE

(March 2023)

SAE DTU participated in various events organised by Cognizance'23, technical fest of the Indian Institute of Technology (IIT) Roorkee, held between March 23rd to 26th. During the Cognizance events, SAE DTU student members participated in various activities, such as workshops, competitions, and presentations. By participating in these events, our student members gained valuable experience, developed their leadership and teamwork skills, and expanded their network of contacts.





## PLATINUM JUBILEE LECTURE SERIES

(February 2023 - Present)

This series of industrial lectures is being organised in collaboration with Department of Mechanical Engineering, DTU. In this series, we invite experts from diversified fields. We were joined by Mr. Sanjay Thakur who is a qualified senior management professional with 25 years of experience in general manufacturing, six sigma, quality systems, operational excellence, quality strategies in the aerospace, automotive semiconductor domain. The second guest was Mr. Anish Mittal who is a pass out of Delhi College of Engineering itself. He is a qualified senior drilling supervisor with fifteen years of experience as drilling engineer, in various global expeditions. He helped us to know about various opportunities in petroleum and natural gas expeditions. They both let us know the practical work in mechanical fields and application of various subjects taught to us in mechanical engineering. Material science is a core subject in identifying the cause of failures of various products and their solutions.



# HYDROJET- INVICTUS 2023

(February 2023)

In this hydro jet event, each team had to prepare a launcher in which they had to launch a water bottle as a rocket by increasing pressure inside the bottle. It was a cross-college event consisting of 2 rounds:

## Round 1 :

All the material will be given to the team and they have to figure out the launcher's design. Each team will design the launcher on the sheet first then only the actual prototype can be made. Points will be awarded on the following basis of structural stability, pressure holding capacity and design.

## Round 2:

Each team will be given 2 chances to launch the rocket. Points will be allocated based on the Maximum height and distance travelled by the bottle (rocket).





## CAR-A-THON, INVICTUS 2023

(February 2023)

Car-a-thon was a quiz conducted by the SAE DTU during Invictus to test participants' knowledge of automobiles. The quiz covered a wide range of topics, including automotive technology, design, manufacturing, and history. Participants were required to answer a series of questions related to these topics, with the fastest and most accurate participants progressing to the later rounds of the competition.

Prizes worth Rs. 10,000 were also given to the winners.



## LIGHTNING MC'QUIZ

(January 2023)

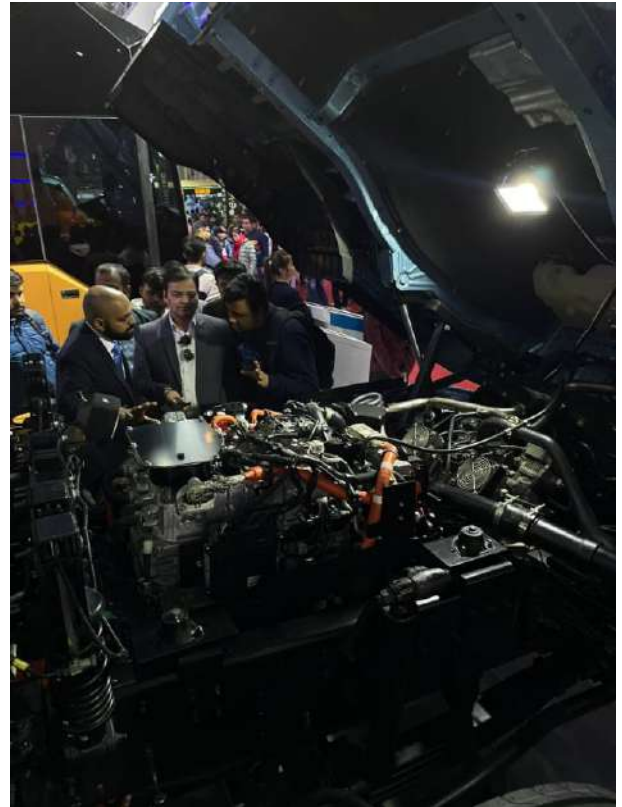
We organised an exciting quiz for all the automotive enthusiasts along with the orientation of the society in which students were to answer several Questions about the automotive industry and each question had a time limit. The top three students who answered most no.s of questions correctly were announced winners and were awarded with prizes like bluetooth earphone, speaker, and writing pad.



## AUTO EXPO VISIT

(January 2023)

SAE DTU organised an Auto Expo visit which was held in Greater Noida. During the Auto Expo visit, members had the opportunity to witness some of the latest advancements in automotive technology, including electric and hybrid vehicles, autonomous driving systems, and innovative safety features. They also got to interact with industry experts and gain valuable insights into the future of the automotive industry. Overall, the SAE DTU Auto Expo visit was a valuable learning experience for its members, providing them with an opportunity to stay up-to-date with the latest developments in the automotive industry and gain valuable insights into the future of the sector.

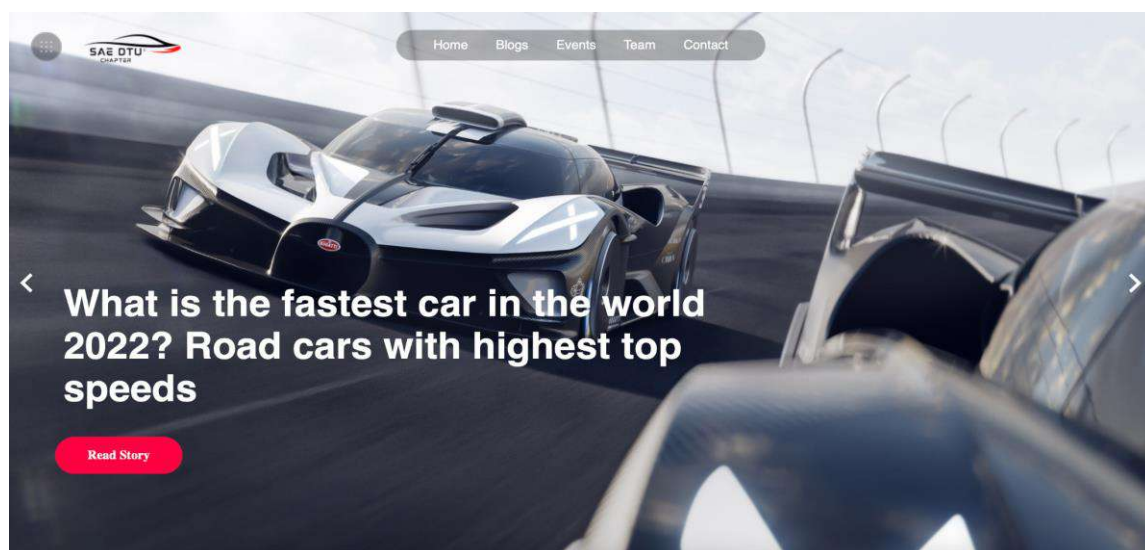




## WEBSITE LAUNCH

(January 2023)

Recently, SAE DTU has launched its own website, [www.saedtu.in](http://www.saedtu.in), to better connect with its members and the wider community. The new website provides a platform for the society to showcase its activities and events, as well as to share news and updates about the automotive industry. It features a user-friendly interface and is easy to navigate, making it a valuable resource for anyone interested in the automotive sector. The website is completely designed and managed by the members of the society. Overall, the launch of the website provides a central hub for the society's members to connect, learn, and collaborate, and is a valuable resource for anyone interested in the automotive industry.



### Discover the World





## PROFILE BUILDING SEMINAR WITH IDP

(September 2022)

We organised a profile building seminar in collaboration with IDP. An interactive session where several key points about a strong profile were discussed, some of the major being:

1. Working on one's CV and Resume
2. Being practical and job-aligned
3. Articulation of interests and focus areas
4. How to stand out in competitive world
5. Importance of gaining necessary skills
6. How to use social media platforms (linkedin) to share one's portfolio.



## ANAGRAM

(July 2022)

SAE DTU organised an online cad modelling competition wherein the participants had to solve an assembly within the specified time span. Five most accurate ones made it to the top and got a chance to win subscriptions of Netflix, Prime Video and Spotify.



## CATAPULT BUILDING COMPETITION- INVICTUS'22

(April 2022)

SAE DTU organised a catapult building competition during Invictus. We received an overwhelming participation in this event. The participants were tested based on their problem solving abilities, mechanical skills and tactics. The catapult designs were judged on the basis of creativity, uniqueness of idea, range and correct application of principles.





## FUTURISTIC CAR DESIGN- INVICTUS'22

(April 2022)

SAE DTU organised a Futuristic Car Design Competition during Invictus. The participants were asked to present their ideas of futuristic vehicles. They were judged on the basis of their creativity, skills, aptness of idea and future relevance.



### Contact Details:

Keshav Aggarwal (President)

+91 9773732227

[sae@dtu.ac.in](mailto:sae@dtu.ac.in)