

Shell Eco-Marathon

Shell Eco-marathon is a unique global programme, for science, technology, and engineering students to design and build ultra-energy-efficient cars, and then take them out on the track in competition. Since 1985, the competition has challenged student teams across the globe to design, build and drive the most energy-efficient cars which have resulted in students coming up with an entirely new breed of '*Hyper-Efficient*' cars. It is one of the world's leading energy efficiency competitions which takes place in three different continents of the world namely, Asia, America, and Europe.

The Shell Eco-Marathon Challenger events are held in 7 countries of the Eurasian continent which include India, China, Brazil, South Africa, Turkey, France, and The Netherlands.

India has hosted the competition twice. In 2018, the competition was held at the Madras Motor Race Track in Chennai and in 2019, for the first time ever globally, the competition was held on a Shell site at the Shell Technology Centre at Bangalore on a purpose-built track.

Team Kaizen

Team Kaizen from PDPU has been consistently participating in the Shell Eco-Marathon competition from the year 2015. The team has come a long way in building their prototype vehicles and improvising upon it year after year.

This year, the team participated in the #MakeTheFuture Challenger event held under the flagship of the Shell Eco-Marathon in Bangalore from 19th to 22nd November 2019 and drove their prototype on the first-ever purpose-built track by Shell at Shell Technology Centre.

Team Kaizen with their prototype car '*Nakshatra*' ranked 2nd amongst teams from all over India by achieving an efficiency of 198.4 km/kWh in the *Battery-Electric Prototype* category.

The team comprises of 29 undergraduate students from Mechanical as well as Electrical engineering discipline, who have worked endlessly in designing, manufacturing and testing the battery-electric prototype vehicle, finally giving it an amazing aesthetic aerodynamic design, reducing its weight, enhancing its electrical circuitry sophistication and adding kilometres in their efficiency parameters.

The team works under the zealous and indispensable guidance of Dr. Amit V. Sant and Dr. Pankaj Sahlot.

For more information visit: <http://www.teamkaizenindia.com/>
And follow on <https://www.instagram.com/teamkaizenindia/>

Team Kaizen 2020			
Sr. no.	Roll No.	Name	Department
1.	17BME088	Rutvik Ghiya	Design
2.	17BME085	Piyush Rathi	Vehicle Dynamics and Analysis
3.	17BEE043	Dhwanil Mody	Powertrain & BMS
4.	17BEE066	Piyush Bansal	Motor & Motor Controller Department
5.	16BME112	Sumit Singh	Brakes and Wheels
6.	16BEE075	Krushnesh Patel	Motor & Motor Controller Department
7.	17BME044	Maanvendra Singh	Steering
8.	17BEE076	Ritik Sharma	Sensors & Data Acquisition
9.	17BEE094	Dhruvkumar Thakkar	Sensors & Data Acquisition
10.	17BEE031	Karan Doshi	Motor & Motor Controller Department
11.	17BEE048	Ojaswini Sharma	Motor & Motor Controller Department
12.	18BME028	Harshil Pancholi	Brakes and Wheels
13.	18BME066	Neh Pandya	Brakes and Wheels
14.	18BME055	Mihir Raval	Steering
15.	18BME059	Mirang Dabhi	Vehicle Dynamics and Analysis
16.	18BEE079	Priyanshi Butani	Powertrain & BMS
17.	18BEE092	Sakshi	Motor & Motor Controller Department
18.	18BEE073	Pranav Pushkar	Motor & Motor Controller Department
19.	18BEE104	Trisha H Parekh	Motor & Motor Controller Department
20.	18ICT068	Mili Mehta	Motor & Motor Controller Department
21.	18BEE002	Abhishek Rawal	Sensors & Data Acquisition
22.	19BME081	Neel Patel	Steering
23.	19BME032	Harsh Sharma	Design
24.	19BEE091	Vivek Singh	Sensors & Data Acquisition
25.	19BEE041	Kunal Jha	Powertrain & BMS
26.	19BEE057	Raghav Sodani	Sponsorship
27.	19BEE002	Achyut	Sponsorship
28.	19BCP083	Mustafa Africawala	Sponsorship
29.	19BEE059	Dhruv Ribbonwala	Sponsorship

Vehicle Information		
Sr. no.	Type	Details
1.	Name	Nakshatra
2.	Category	Battery Electric
3.	Total Weight	48 kgs
4.	Body Material	Carbon fiber
5.	Drag Coefficient	0.0456
6.	Steering	Ackermann Geometry
8.	Tire's CRR	0.004-0.005

Performance		
Sr. no.	Event	Result
1.	Shell Eco-Marathon India 2019	Cleared Technical Inspection; Efficiency: 198.4 km/kWh 2nd in India
2.	Shell Eco-Marathon Asia 2019	Cleared Technical Inspection; Efficiency: 122.8 km/kWh 12th in Asia and 3rd in India
3.	Shell Eco-Marathon Asia 2017	Cleared Technical Inspection; Efficiency: 81 km/kWh 16th in Asia and 2nd in India





