

AD BIKE - TEAM HYPERION



Quad Tore is an off-road design challenge presented by Team Hyperion, offering students the opportunity to conceive, design, and create a quad bike (ATV) with a four-wheel configuration powered by a 250cc engine, adhering to specified rules and regulations. The primary focus is on engineering the vehicle for both performance and safety while ensuring ergonomic design. The ultimate goal is to foster innovation and raise awareness among young engineers, encouraging practical learning.

The students are developing a quad bike to participate in an event organized by ISNEE (Indian Society of New Era Engineers MOTORSPORTS), an organization dedicated to the technical and managerial development of students. ISNEE challenges undergraduate and diploma students to engage in research and develop innovative projects. Their series of design competitions provide students with the opportunity to form teams, work together towards a common goal, and showcase their creativity and engineering skills when compared to teams from other universities and colleges across the country.

Quad Tore aims to offer participating teams maximum design flexibility and the freedom to express their creativity and imagination. The challenge posed to teams is to create an all-terrain vehicle capable of competing successfully in all the events planned by the ISNEE team.



The entire team “HYPERION” was initially inspired by our mentor, Principal Dr. Mohd. Zafar Shaikh, and Vice Principal Mrs. Neeta G. Kadukar. Mr. Virag A. Timbadia, a faculty member in the Mechanical Engineering Department, served as the overall coordinator for the team. The team consisted of faculty members from various programs, who provided guidance and support to the students in their respective areas of expertise. Mr. Virag A. Timbadia and Mr. Girish B. Deshpande (Faculty - Mechanical Engineering) were responsible for the design and manufacturing of the quad bike, with Mr. Ashutosh S. Shukla (Faculty - Mechanical Engineering) offering support as needed. Mrs. Meghna P. Humbal (Faculty - Plastics Engineering) played a key role in manufacturing the plastic body of the quad bike. Mr. Namdeo D. Adate (In-Charge Head - Electrical Engineering), Mr. Prasad S. Dhuri (Faculty - Electronics and Telecommunications Engineering), and Mr. Pankaj D. Rathod (Faculty - Information Technology) also contributed their expertise to assist the team when required.

The process of designing, fabricating, and testing the quad bike before sending it to the final competition served as a valuable learning experience for the student team of academic year 2022 - 23. They put in significant effort to complete all aspects of the quad bike, including presenting a business proposal and sharing test reports online to validate the bike before sending it to the competition venue. The ISNEE motor competition took place in Bhopal, Madhya Pradesh from August 3rd to August 7th, 2023. It featured 12 teams from all over Maharashtra, with SBM Polytechnic, Mumbai being the sole team of diploma students competing alongside degree students.

Despite facing numerous challenges during the construction of the quad bike, Team Hyperion demonstrated perseverance and secured an impressive fifth-place ranking in the competition. The competition involved various tests and trials, including Technical Inspections (TT), braking tests, and challenges like Kill the Hill, suspension tests, fuel economy evaluations, endurance tests, and the demanding Mud Walker trial. Overall, Team Hyperion's journey in the competition for past 3 years proved to be a rewarding experience, and they wholeheartedly encourage others to participate in similar competitions to acquire valuable knowledge and skills.



Faculty Team Members:

Mr. Virag A. Timbadia (ME)
Mr. Girish B. Deshpande (ME)
Mr. Namdeo D. Adate (EE)
Mr. Pankaj D. Rathod (IT)
Mr. Ashutosh S. Shukla (ME)
Mr. Prasad S. Dhuri (EXTC)
Mrs. Meghna P. Humbal (PE)

Student Team Members:

Mechanical Engineering

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| • Navdish Nagrecha (Captain) | • Kirtan Dodia |
| • Vidit Hode (Manager) | • Jay Jasani |
| • Tanmay Vispute (Driver) | • Jay Zope |
| • Parth Prajapati (Designer) | • Priyanshu Singh |
| • Ratnesh Gaud | • Aayush Patil |
| • Bhushan Dhanu | • Ayush Mishra |
| | • Niyati Shah |

