



PULSE

DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER - JANUARY 2022

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Principal's Message



I feel proud and honour to write this message because this newsletter is the testimonial of the commitment of Mechanical Engineering Department towards the outcome based education and enhanced student - teacher learning process which is inline with the vision and mission of the department. I hope that the department will strive further to improve the quality of the education and bring laurels to the institute.

Dr. K. Ashoka Reddy

HoD's Message



A newsletter is like a mirror which reflects the clear picture of all sorts of activities undertaken by the Department. It is a matter of great pride and satisfaction for Mechanical Engineering to bring out the Newsletter. I am confident that this issue of the Mechanical Engineering Department newsletter will send a positive signal to all the students, faculty and staff. Congratulations to the Editorial Board of this newsletter who have played a wonderful role in accomplishing the task. Heartfelt congratulations to staff members and Students for their fruitful effort during the period.

Best Wishes

Dr. K. Raja Narender Reddy

Mechanical Student Placements in January 2022

TechnipFMC



Aachi Venkata Satya Ramanuja Charyulu
B18ME003



Pollapelli Bhavana
B18ME053



Bojjam Bindu
B18ME092



Suryadevara Sai Charan
B18ME109



L. Shanmukha Srinivas
B18ME132



Saketi Ravi Teja
B18ME138

Journals published by the faculty in January 2022

Om Prakash Minugu and Shakuntala Ojha, "Study of environmental behavior and its effect on solid particle erosion behavior of hierarchical porous activated carbon-epoxy composite", polymer composites, January 2022, DOI : 10.1002/pc.26539

NPTEL Courses Registered Students - (171)

Advanced Thermodynamics	:	04	Data Science for Engineers	:	01
AI: Constraint Satisfaction	:	01	Design Practice	:	05
An Introduction to Artificial Intelligence	:	05	Design, Technology and Innovation	:	01
An Introduction to Programming Through C++	:	08	Ethical Hacking	:	06
Artificial Intelligence: Knowledge Representation And Reasoning	:	03	Experimental Methods in Fluid Mechanics	:	01
Automatic Control	:	02	Explosions and Safety	:	01
Basic Calculus - 1	:	02	Finite Element Method	:	02
Basic Linear Algebra	:	09	Fundamentals of Automotive Systems	:	02
Cloud Computing	:	01	Fundamentals of Combustion	:	02
Computational Fluid Dynamics for Incompressible Flows	:	04	Fundamentals of Combustion for Propulsion	:	03
Computer Integrated Manufacturing	:	02	German - I	:	01
Convective Heat Transfer	:	01	IC Engines and Gas Turbines	:	01
Data Base Management System	:	01	Industrial Automation and Control	:	01

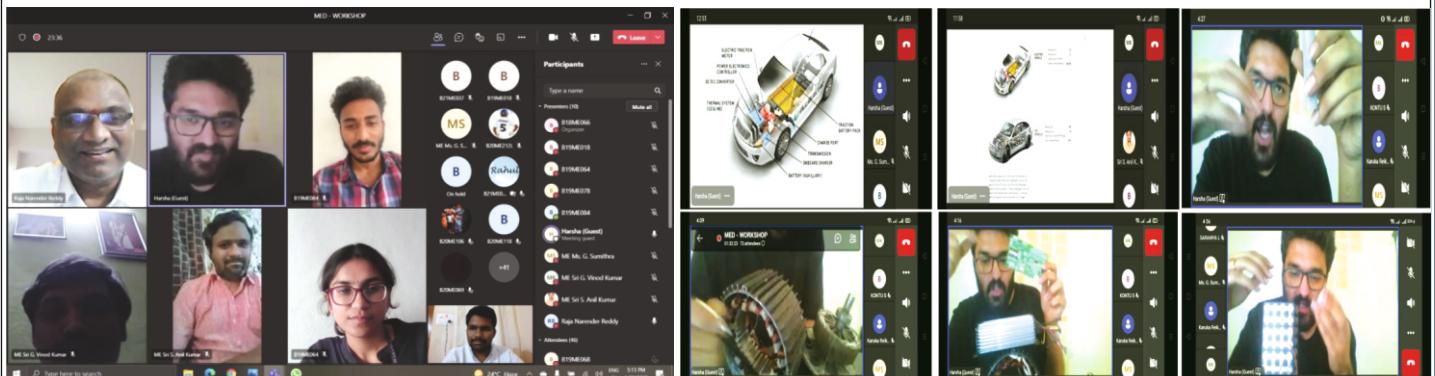
NPTEL Courses Registered Students - Contd.

Inspection and Quality Control in Manufacturing	: 02	Programming In Java	: 04
Introduction To Fluid Mechanics	: 04	Nature and Properties of Materials	: 01
Introduction to History of Architecture in India	: 01	Noise Management & Control	: 01
Introduction To Industry 4.0 And Industrial Internet of Things	: 06	Object Oriented System Development Using UML, Java And Patterns	: 02
Introduction to Machine Learning	: 05	Oil Hydraulics and Pneumatics	: 04
Introduction to Machining and Machining Fluids	: 01	Product Design and Manufacturing	: 03
Introduction To Mechanical Micro Machining	: 01	Programming In Java	: 04
Introduction To Programming In C	: 01	Programming, Data Structures And Algorithms Using Python	: 06
Manufacturing Automation	: 03	Robotics and Control : Theory and Practice	: 12
Manufacturing Guidelines for Product Design	: 01	Robotics: Basics and Selected Advanced Concepts	: 03
Manufacturing Process Technology I & II	: 12	Rocket Propulsion	: 01
Mechanical Measurement Systems	: 01	Smart Materials and Intelligent System Design	: 01
Mechanics of Machining	: 03	Steam and Gas Power Systems	: 01
Mechatronics	: 03	Theory and Practice of Non Destructive Testing	: 01
Nature and Properties of Materials	: 01	Thermal Physics	: 01
Noise Management & Control	: 01	Vibrations of Structures	: 01
Object Oriented System Development Using UML, Java And Patterns	: 02	Water and waste water treatment	: 02
Oil Hydraulics and Pneumatics	: 04	Wheeled Mobile Robots	: 08
Product Design and Manufacturing	: 03		

As part of Sumshodhini'21 Mechanical Engineering Department had conducted Several Technical Events organized by the Mechanical Engineering Students Association (MESA)

Workshop on 'BUILDING AN ELECTRIC VEHICLE' - BY UTON ENERGIA

Electric Vehicles: An electric vehicle (EV) is one that operates on an electric motor, instead of an internal-combustion engine that generates power by burning a mix of fuel and gases. Therefore, such as vehicle is seen as a possible replacement for current-generation automobile, in order to address the issue of rising pollution, global warming, depleting natural resources, etc.

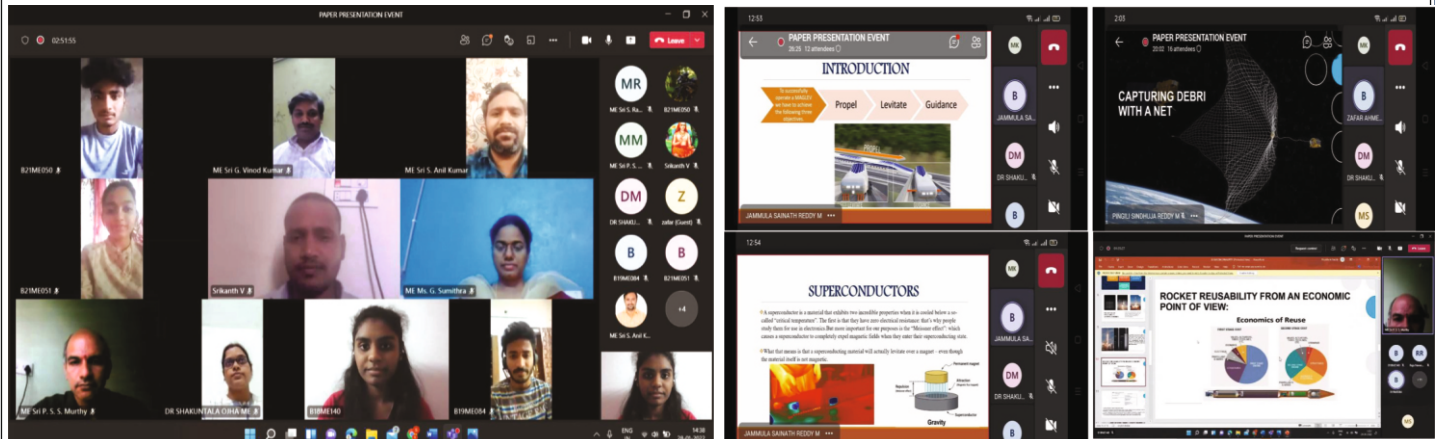


Mr. K. Harshavardhan, Founder & CEO, UTON ENERGIA, Hyderabad, Speaking at inauguration of Workshop "Building an Electric Building Vehicle" as a part of Sumshodhini'21 on 27th January-2022

Mr. K. Harshavardhan, discussing the working principles of various components of electrical vehicle such as D.C motor, intelligent control board, battery, battery bank etc.

PAPER PRESENTATION

Paper presentation is an individual competition where each participant is required to make a paper about a given topic or area, and then present it in front of the juries.



MESA faculty In-charges, Faculty Mentors, Student organizers and the participants during the Paper Presentation Event as a part of Sumshodhini'21 on 27th -29th January-2022

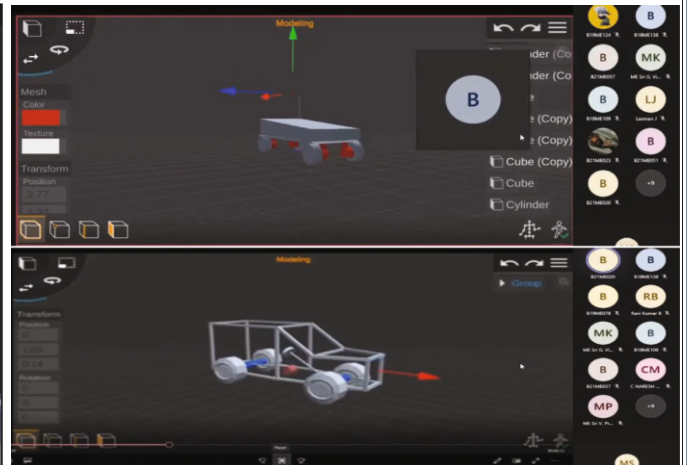
Students explored the content with respect to the innovative technologies, like Magnetic Levitation for propulsion, Super-conductors, Reusable Rockets etc.

ROBO RACE

In this event a CAD model is to be made by the participants prior to the event with the following requirements



MESA faculty In-charges, Faculty Mentors, Student organizers and the participants during the Robo Race Event as a part of Sumshodhini'21 on 27th -29th January-2022

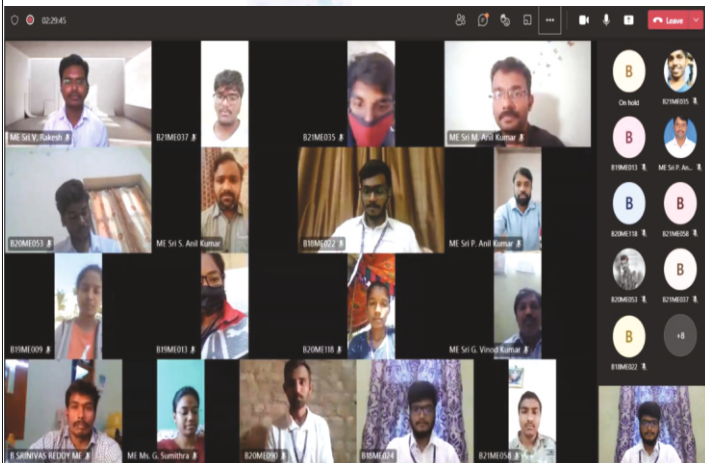


Students participation in the Robo Race event, students as explored their models done using the modeling software during the event conduction

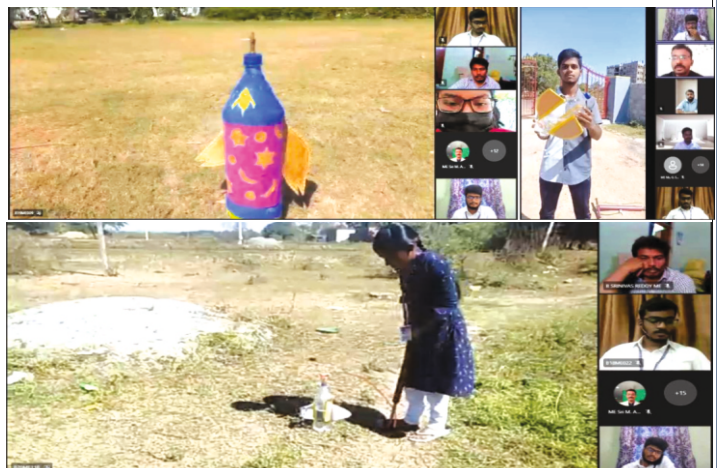
ROCKETRIX



A water rocket is a kind of model rocket involving water as its response mass. The water is constrained out by a compressed gas, normally packed air. Like all rocket motors, it works on the rule of Newton's third law of movement.



MESA faculty In-charges, Faculty Mentors, Student organizers and the participants during the Rocketrix Event as a part of Sumshodhini'21 on 27th -29th January-2022



Students participation in the Rocketrix event, students were tested by posting question on the area dynamics, rocket propulsion and other mechanical engineering subject.

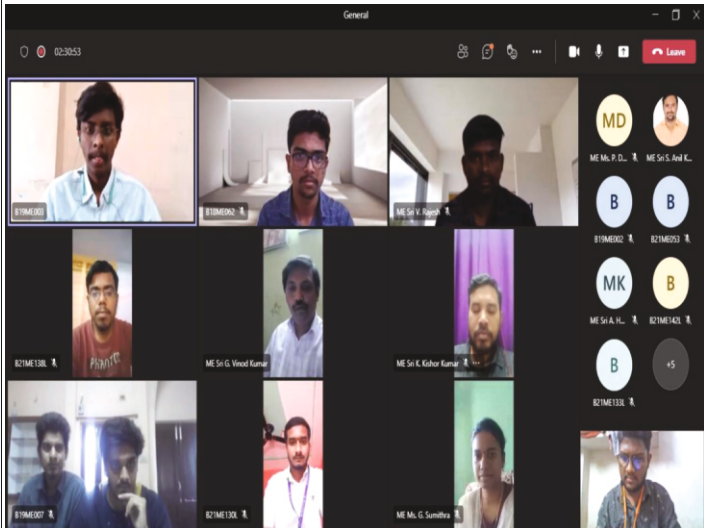
ROBO STRIKER



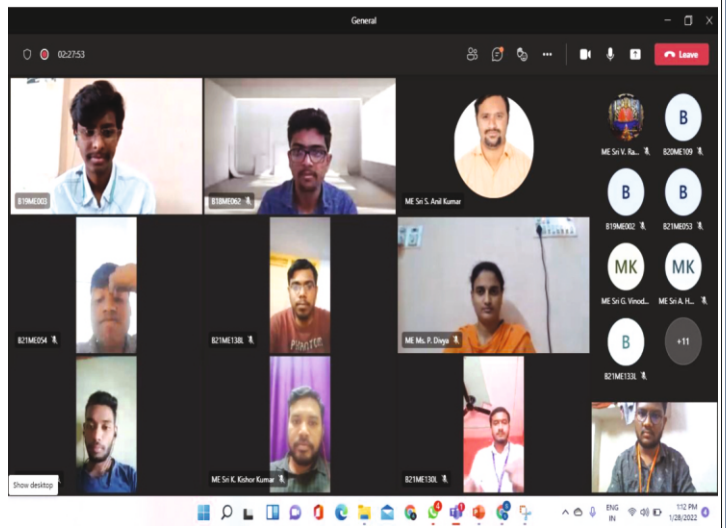
The Robo Striker event conducted consists of two rounds based upon the individual scoring the winners are decided. The concept keeping two rounds is to students get a strong base on public speaking and sparkling communication skills. And from the soccer game play the communication, understanding one another for each other.



MESA faculty In-charges, Faculty Mentors, Student organizers and the participants during the Robo Striker Event as a part of Sumshodhini'21 on 27th-29th January-2022



MESA faculty In-charges, Faculty Mentors, Student organizers and the participants during the Quizohilic Event as a part of Sumshodhini'21 on 27th -29th January-2022



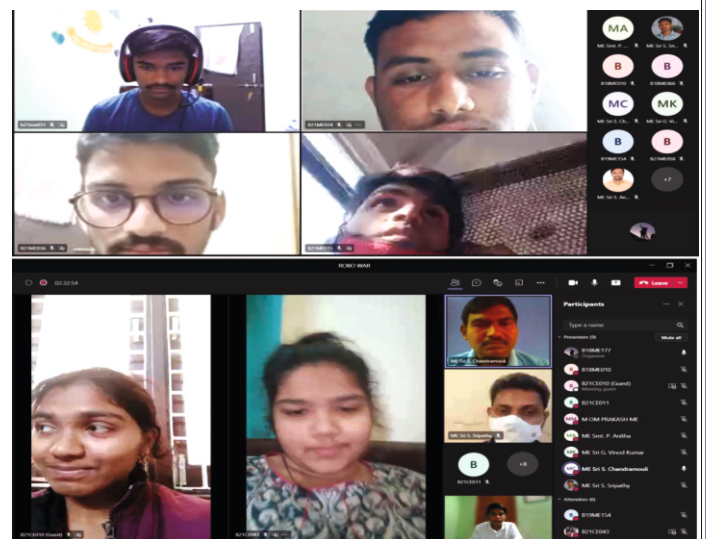
Students participation in the Quizohilic event, students were tested by posting question on the screen with new and current technologies



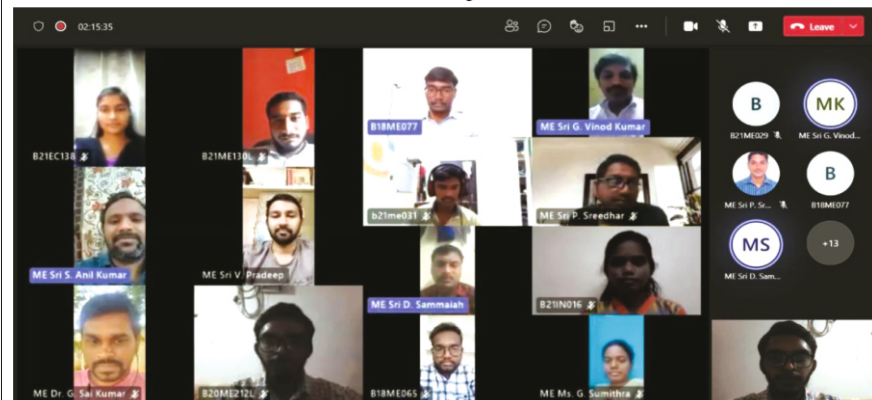
Design a wired or wireless manual robot that can participate and compete with the opponent robot in a war with designed weapons that to be used during the war.



MESA faculty In-charges, Faculty Mentors, Student organizers and the participants during the Robo War Event as a part of Sumshodhini'21 on 27th -29th January-2022



Students participation in the Robo War event during 27 -29th Jan'22



MESA faculty In-charges, Faculty Mentors, Student organizers and the participants during the Power Lifting Rally Event as a part of Sumshodhini'21 on 27th -29th January-2022



Dr.G. Ganesh Kumar, Associate Professor of ME visited Karthik Moulds and Dies at Balanagar, Hyderabad in connection with IAAHP