

MEXPRESS

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WIND-DIESEL SYSTEM



Mr. Nithesh S V
20BME080
2nd Mech.- B

Introduction:

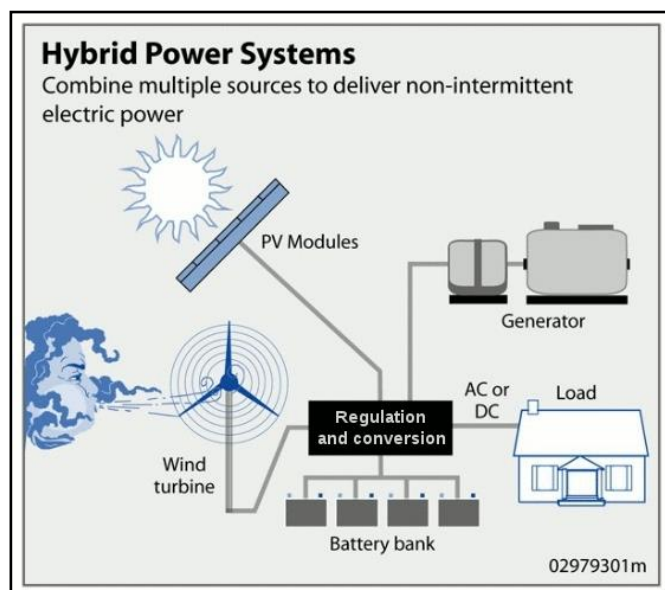
It can be said as combination of two or more energy sources results in Hybrid technology. Similarly, the combination of wind energy and the diesel power results in the hybrid system. This will be in more need for the remote locations. If there is a good wind energy, then the electricity will be produced and given at low cost itself.

Wind Energy Suitability?

Considering the remote located areas, for power supply, wind energy would be a good alternate source. It results in good economy in areas which have Local wind conditions, excessive cost for other alternative energy sources, Seasonal vibration of wind energy and load.

Hybrid system:

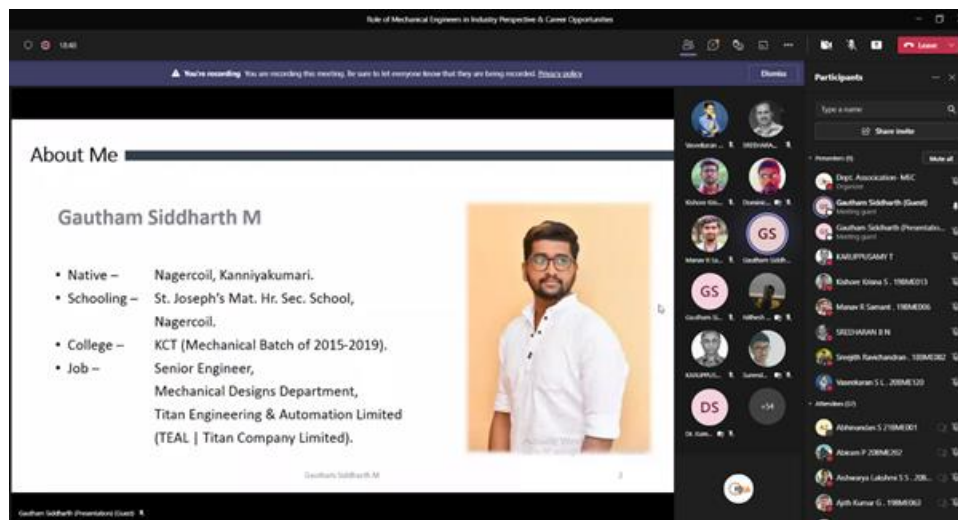
As a result of combination as Wind – Diesel, it brings a hybrid system, which is an difficult task and expertise is required. It is done using computerized calculations to determine the values. It is really a lengthy process, which does not involve just buying and assembling the parts. They need a good, combined team with all types of technicians involved, and strong documentation for installation. All the team members, operators and other must have done proper training. Proper funds must be allocated for maintenance, repair, replace of products in all necessary conditions.



Features:

- ✚ Large wind capture capability
- ✚ One or more wind turbines
- ✚ One or more diesel gensets
- ✚ Diesel gensets can be shut down when the wind is sufficient
- ✚ Standard diesel gensets can be used (no clutch or flywheel needed)
- ✚ Ability to integrate solar or hydro power
- ✚ Large batteries, containing lead, acid, or cadmium, are not necessary
- ✚ Open control system, based on LonWorks technology.

PROGRAMMES ORGANIZED



- Department organized a Webinar titled “Role of Mechanical Engineers in Industry Perspective & Career Opportunities” in association with Mechanical Engineering Association on 23-01-2022. **Mr. M. Gautham Siddharth**, Senior Engineer, Titan Engineering Automation Limited, Bengaluru addressed the gathering. **Dr. T. Karuppusamy**, Assistant Professor – II and **Dr. B. N. Sreeharan**, Assistant Professor – II coordinated the event.



- Another Webinar on “Quality Council Meet – 2” was organized by the department in associated with IIC on 28-01-2022. **Dr. Lakshmi Meera** - Program Director FORGE Accelerator, **Mr. Sriram Sankaran** - Director, Natesan Company & Synchron Group, **Mr. Divyanshu Verma** - CEO, Secritic., **Mrs. Radha** – Founder, Spikra, **Mr. Subramanian**-Associate Director, Altacit Global participated in the meet. **Dr. S. Balasubramanian**, Associate Professor coordinated the webinar.





- One more Webinar on “Embrace Global Education on your fingertips” was organized by the department on 29-01-2022. **Mr. Ranjith Khumar Shanmugasundaram** - Research Associate at Wikki GmbH was the resource person. **Dr. V. R. Muruganatham**, Associate Professor and **Mr. M. A. Vinayagamoorthi**, Assistant Professor coordinated the event.



FACULTY AS RESOURCE PERSONS



Dr. S. Bhaskar, Associate Professor handled a three-hour session on 25.01.2022 on “Outcome Based Education” during the 9th Online Faculty Induction Programme (17-01-2022 to 15-02-2022) organised by UGC - Human Resource Development Centre (UGC-HRDC) Sardar Patel University Mota Bazar, Opp. SICART, Vallabh Vidyanagar-388 120, Gujarat.

Dr. Bhaskar, also handled another one-hour session on 27.01.2022 on “Azadi ka Amrut Mahotsav: Evolution of IE and its role in development of industries” – lecture organized by the Coimbatore Chapter of Indian Institution of Industrial Engineering (IIIE) to commemorate “Industrial Engineering Foundation Day.”

Dr. M. Thirumalaimuthukumar, Assistant Professor – II handled two two-hour sessions on 04.01.2022 (FN) on “2D Scalar variable problem with Hands on in Ansys APDL” and on 07.01.2022 (FN) on “2D Vector variable problem with Hands on in Ansys APDL” in Anna university sponsored online six days FDTP on Finite element Analysis (03-01-2022 to 08-01-2022) organised by Department of Mechanical Engineering, Dr. N. G. P Institute of Technology, Coimbatore – 48.





Dr. M. Balaji, Associate Professor handled a 2-hour session (05.01.2022) on 'INDUSTRY 4.0 - EVOLUTION & IMPACT' for an AICTE-ISTE sponsored Induction program on 'Advanced Manufacturing Technology' at Sri Ramakrishna Polytechnic College, Coimbatore.

PAPER SUBMISSION

Dr. S. Balasubramanian, Associate Professor submitted his three papers in various Scopus indexed journals for publication.



Dr. R. Manivel, Professor, submitted a paper entitled, "Action Research on Learning Difficulties of Calculus for First Year Engineering Students" to International Journal of Mathematical Education in Science and Technology.

PAPER PUBLICATION



Dr. B. N. Sreeharan, Assistant Professor – II published a paper entitled "A Systematic Way for Selecting Suitable Journal for Publishing Manuscripts" in International Journal of Algorithms and Computation, 53 issue 2, pp 157 – 164.

Dr. V. R. Muruganantham, Associate Professor published a paper entitled "Productivity enhancement in garment industry using industrial engineering principles" in an International Journal.



PAPERS REVIEWED



Dr. C. Velmurugan, Professor and HoD reviewed papers entitled "Bonding Properties of Al (Al₂O₃) Bulk Composites Produced Via Combines Stir Casting and Accumulative Press Bonding" for the International Journal of Surface Review and Letters and "Characterization and Evaluation of Mechanical Properties of Al-Zn Based Hybrid Metal Matrix Composites" for the Journal of Applied Science and Engineering Progress.

Dr. V. Muthukumaran, Professor reviewed a paper entitled "Designing thickness of subgrade for flexible pavements incorporating Waste Foundry Sand, Molasses and Lime" for the International Journal of Engineering, Design and Technology.





Dr. S. Balasubramanian, Associate Professor reviewed a couple of papers entitled "Utilization of Tractor power using front three-point linkage" and "Analysis and optimization of Composite propeller shaft for automotive applications" for the International Conference on Design, Manufacturing and Materials Engineering -2021.

INDUSTRY LINKAGE



Dr. N. Sangeetha, Sr. Associate Professor on 06-01-2022 met Mr. Krishnamoorthy, Head CAE, Royal Enfield, Chennai and on 11-01-2022 Mr. Niranjana Parameshwaran, SME, Senthil Towers, Coimbatore for arranging internships to the students.

PATENT

Mr. M. A. Vinayagamoorthis, Assistant Professor – II, **Dr. S. Balasubramanian**, Associate Professor, **Dr. S. Thirumurugaveerakumar**, Associate Professor, **Ms. C. Bharathi Priya**, Assistant Professor / CSE, **Ms. X. Francis Jency**, Assistant Professor / CSE and **Ms. D. Aswini**, Assistant Professor / CSE are in progress for submitted their patent, "An Automated Non-Contact Measurement System in Lathe Machine."



Mr. M. A. Vinayagamoorthis, Assistant Professor – II, **Dr. B. N. Sreeharan**, Assistant Professor – II, **Ms. D. Aswini**, Assistant Professor / CSE, **Mr. J. Steve Leo**, II Mech and **Mr. K. K. Praveen Hari**, III CSE are in progress for submitted their patent, "A Non-Contact ATM Withdrawal System."



PROGRAMMES ATTENDED / COURSES COMPLETED



Mr. S. Subbiah, Assistant Professor participated in an Industrial Training on "Windmill erection and Maintenance" from 06-01-2022 to 09-01-2022, organized by Connect Wind Power India, Udumalpet.

Mr. P. D. Devan, Assistant Professor participated in a Workshop on "Current State of Art: Smart Cities and Its Challenges with an Indian Scenario" on 06-01-2022 organized by Parul University jointly with L&T-S&L, NASSCOM, NIRVEDHA-Tech through online.



Mr. R. S. Mohan Kumar, Assistant Professor participated in an Industrial Training on "Windmill erection and Maintenance" from 06-01-2022 to 09-01-2022, organized by Connect Wind Power India, Udumalpet.

Mr. M. A. Vinayagamoorthi, Assistant Professor - II participated in a webinar on "Turnip Innovation Festival 2022" from 22-01-2022 to 22-01-2022, organized by Turnip.



Dr. V. R. Muruganantham, Associate Professor participated in a Workshop on "Current State of Art: Smart Cities and Its Challenges with an Indian Scenario" on 06-01-2022 organized by Parul University jointly with L&T-S&L, NASSCOM, NIRVEDHA-Tech.

Dr. V. Muthukumar, Professor completed an Online course on "Introduction to Solar Cells" from 22-01-2022 to 31-01-2022, organized by Introduction to Solar Cells, Introduction to Solar Cells.



Dr. V. Manivelmuralidaran, Assistant Professor II participated in an FDP on "Five days Faculty development program on 'Advancements in Aerospace Materials- Manufacturing, Testing and Characterization'" from 24-01-2022 to 28-01-2022, organized by Hindusthan college of Engineering and Technology, Coimbatore.

Dr. S. Balasubramanian, Associate Professor participated in a Webinar on "Orientation of IIC Q4 2022" on 24-01-2022 organized by IIC- MoE, online. He also participated in a Webinar on "Inaugural of IIC 2022" on 11-01-2022 organized by IIC- MoE.





Dr. M. Balaji, Associate Professor participated in an Industrial Training on “Windmill erection and Maintenance” from 06-01-2022 to 09-01-2022, organized by Connect Wind Power India, Udumalpet.

Dr. B. N. Sreeharan, Assistant Professor II participated in an FDP on “Five days Faculty development program on 'Advancements in Aerospace Materials- Manufacturing, Testing and Characterization'” from 24-01-2022 to 28-01-2022, organized by Hindusthan college of Engineering and Technology, Coimbatore. He also participated in a Webinar on “Recent Trends in Additive Manufacturing Technology” on 29-01-2022, organized by JCT College of Engineering and Technology, Coimbatore.



Dr. A. P. Arun, Assistant Professor II participated in an Industrial Training on “Windmill erection and Maintenance” from 06-01-2022 to 09-01-2022, organized by Connect Wind Power India, Udumalpet.

Following faculty members participated in “Curriculum Plus” organised by M/s. ILENSYS Technologies , Coimbatore on 27.01.2022 through online mode.

- Dr. R. Manivel, Professor
- Dr. N. Sangeetha, Sr. Associate Professor
- Dr. T. Karuppusamy, Assistant Professor – II
- Mr. M. A. Vinayagamoorthis, Assistant Professor – II





LISTEN UP, STARTUP ENTHUSIASTS!

PRAGATI 2022 IS HERE!

A National Level Business Plan Competition which provides a platform for deeply passionate minds to enter the world of innovation and take their ideas to next level!

WIN PRIZES WORTH MORE THAN ₹ 50,000!

Why Register?

- Get Participation Certificate
- Networking Opportunities
- Showcase your idea
- Receive Mentorship

Scan the QR Code to Register Now!



REGISTER NOW AT WWW.ECELLSFITPRAGATI.COM | CONTACT: DEV SURVE - 98926 21262

About the Contest:

Pragati 2022 is a national level competition where enterprising students present their shrewd business plan along with their innovative solutions. We aim at providing a platform for students with a business vision to compete with teams across India and transform their novel ideas into a market-ready business plan.

Who can apply:

- Undergraduate students from professional courses (B. E. /B. Tech./BBA etc.) are eligible. Post graduate candidates (M. Tech. / ME / MBA) are not eligible to participate. For institutions under Mumbai University, participation is allowed from second year onwards.
- Past participants are eligible to participate in Pragati with a different idea compared to previous years.

Rewards:

1st Prize: ₹30,000

2nd Prize: ₹20,000

3rd Prize: ₹10,000



ProjectContest.com
Spreading Innovations



in Association with
Enthu Technology Solutions
India Pvt Ltd



Industrial Internet of Things using LoRaWAN Technology

Training-Cum-Internship

Software to be used:
Embedded C, Arduino IDE, Raspberry Pi OS

Who can Apply:
Student / Individual / Job Seekers / Working Professionals

Topics to be Covered:

- ▶ Introduction to IoT, Embedded systems & Embedded C, Microcontrollers, Arduino IDE, Industry 4.0
- ▶ ESP 32 microcontroller : Sensor interfacing, Data monitoring in the cloud, Device control using Cloud platform and Mobile application
- ▶ Bluetooth and Bluetooth Low Energy (BLE) : Data Accessing , Device Control
- ▶ Raspberry Pi : Sensor Interfacing, Device control , ADC interfacing using Cloud platform & Mobile application, Programming using Python
- ▶ Node : Red platform- Device control, Data monitoring
- ▶ LoRaWAN : Architecture, Gateway Configuration, Library Configuration, RF communication
- ▶ End device OTAA & ABP Mode Activation : Data monitoring , Payload Decoder, Dashboard creation & data visualization in Application server

For Training Registration

www.bit.ly/itp011enthutech

Training Plan:

- ▶ Live session : 60 Days / 8 Week / Weekend 4 hrs
- ▶ Internship and Course Certification will be given to active participants as per the internship norms.
- ▶ Batch Starts from 1st Week of March 2022
- ▶ Limited Seats based on First-cum-First Confirmation

Course + Internship + Idea Event

Training Fee:

INDIVIDUAL (Student)
INR 1200 - PER REGISTRATION

TEAM (Student)
INR 4000 - 4 MEMBER REGISTRATION

OTHERS (Faculty/Research Scholar/Job Seekers)
INR 1500 - PER REGISTRATION

Last Date to Enroll : 20.02.2022

Payments:

Project Contest Innovations LLP
UPI ID: projectcontest@icici
Acc no: 768705000092
IFSC: ICIC0007687 Bank: ICICI Bank,
Type: Current
Gpay : 9500293472

Sessions will be handled by Industry Experts from
Enthu Technology Solutions India Pvt Ltd.,

Participants will receive Course Completion (40 Hrs)
Certificate and Internship Certificate (60 Days).

REACH US

+91 82203 45819, 95002 93472, 73495 99282

training@projectcontest.com



@ProjectContest

Who can Apply:

- ✦ **Level 1:** Student design projects This category shall be open for all students from any institute in any stream from across India.
- ✦ **Level 2:** Existing start-up projects This category shall be open for registered entities in a stand-alone capacity or being incubated at any government or private incubator.
- ✦ **Level 3:** Start-ups with PoC offering solution to existing problem statements identified under the Make in India drives by Army, Navy, or Airforce This category shall be open for business entities of any level or scale.

About the Contest:

For Advancing the Defence Design and Technology Incubator of India (DDTII) initiative, the “DRDO Defence Innovation Challenge” has been launched by DDTII in partnership with the Defence Research and Development Organization (DRDO) and the Department of Science and Technology of Gujarat (DST). It aims to help Startups/MSMEs/Innovators to prototype and/or commercialize products/solutions in the field of National Defence and Aerospace.

How to Apply:

Applicants are required to provide the following information in the application:

- i. Full Details of a Single Point of Contact for the applying entity – these are the full contact details of a single person who will act as the point of contact between DDTII and the applicant. We encourage that this person be a core member of the applicant entity (Startup/ MSME).
- ii. Entity Details – these are the details of the Startup/MSME applying. Individuals Innovators do not have to fill these.
- iii. Proposal Details – these are the details of the proposal in response to the defence

Who can Apply:

Tata InnoVerse is open for entities, individuals, teams, academicians, scientists, start-ups, companies, research centres and universities to submit their proposed solutions.

Contest Outcomes:

1. Creatively engage with stimulating problems beyond your own context
2. Use the opportunity to express your leading-edge solutions
3. Contribute to the emerging phenomenon of collaborative solution's
4. Help Tata companies accelerate their innovations in the diverse sectors

Rewards:

- 1.5 Lakh INR to 10 Lakh INR



International Arduino Programming and Embedded System Internship Training Arduino - 2022, Top Engineers, Internship Training, Chennai, Tamil Nadu, 11th February - 11th March 2022

Category: Internship Training

Start Date: 11th February 2022

End Date: 11th March 2022

Event Mode: Online

Organiser: Top Engineers

City: Chennai

State: Tamil Nadu.

REGISTER LINK: <https://topengineersindia.com/events/international-arduino-programming-and-embedded-system-internship-training-arduino-2022/>

1 MONTH

ONLINE MODE

OPEN TO ALL ENGINEERING AND DIPLOMA STUDENTS

REGISTRATION FEES

INR 2500/- PER PERSON (INDIA) (including GST)

\$100 USD (FOR OTHER COUNTRIES)

GROUP DISCOUNT OFFER

Group of 5 & above will get 5% Discount

Group of 10 & above will get 10% Discount

BROCHURE LINK: <https://topengineersindia.com/events/international-arduino-programming-and-embedded-system-internship-training-arduino-2022/>

International Automobile Internship Training Auto 2022, Top Engineers, Internship Training , Chennai, Tamil Nadu, 16th February - 16th March 2022

Category: Internship Training

Start Date: 16th February 2022

End Date: 16th March 2022

Event Mode: Online

REGISTER LINK: <https://topengineersindia.com/events/international-automobile-internship-training-auto-2022/>

1 Month

online Mode

Open to all Engineering and Diploma Students

Registration Fees

INR 2500/- Per Person (India) (including GST)

\$100 USD (for Other Countries)

Group Discount offer

Group of 5 & above will Get 5% Discount

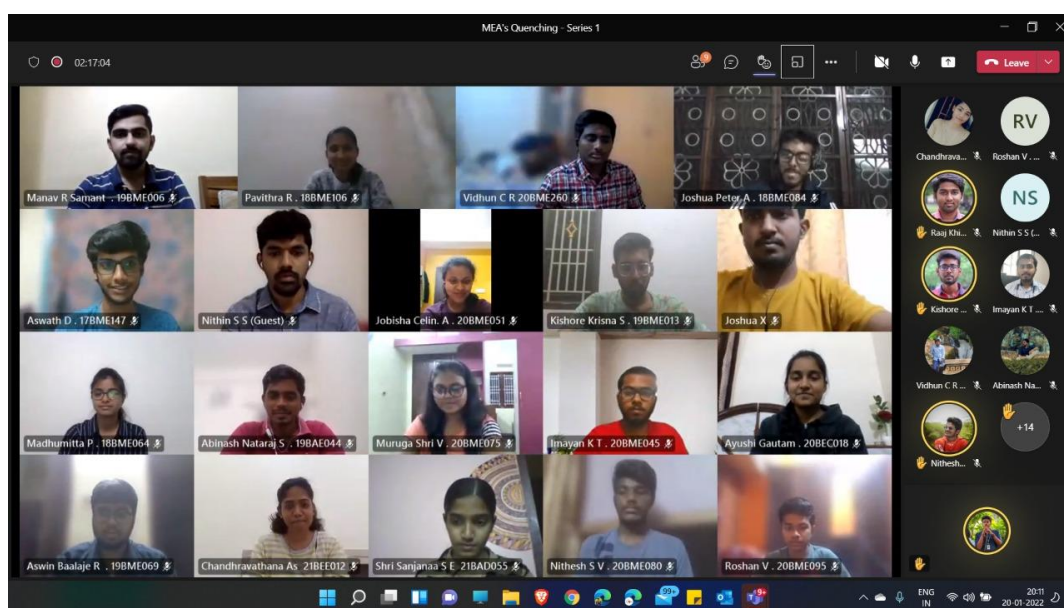
Group of 10 & above will Get 10% Discount

BROCHURE LINK: <https://topengineersindia.com/events/international-automobile-internship-training-auto-2022/>

Quenching - Personal Leadership Workshop

The session was organized by Mechanical Engineering Association, which was a two-day detailed workshop on unlearning and learning personal leaderships. It was conducted on 19th and 20th of January 2022, from 6:00 to 8:00 PM. **Mr. Nithin S S** was the guest speaker for this session.

Mr. Nithin S S is currently working as a Junior Executive in TATA Advanced Systems Limited. He was the co-founder of TURN UP-Sports leadership Development forum. He was awarded the KCT Achiever's award for showing productiveness in co-curricular and extra-curricular activities and exhibiting active leadership and volunteerism.

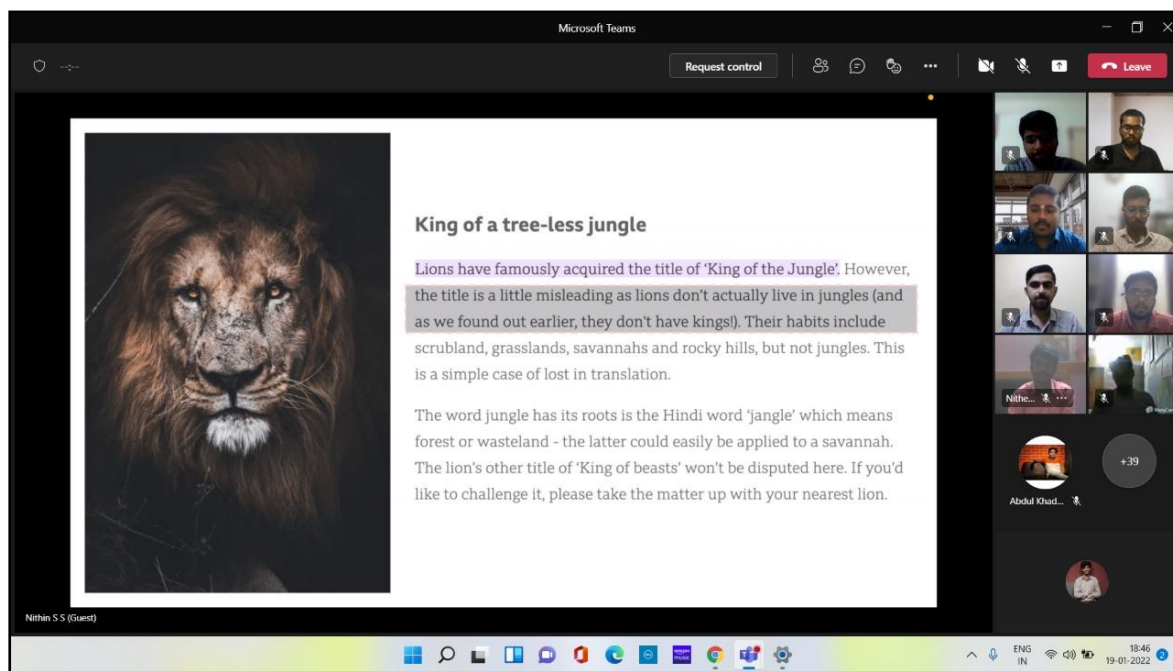


Day 1:

This amazing session was started with a brief introduction about the speaker, Mr. Nithin S S. He started with his presentation on general topic of fundamental rules and gave some activity to be performed by the students. All the students were equally split up into Breakout rooms along with some set of seniors to monitor. The activity was to prepare a presentation based on the "Self – realization."

What do you learn from a sports team?
What tends a person to improve?

These were the questions given to know about ourselves and was happening as a team discussion. Finally, every team was asked to do the presentation and was discussing the final outcomes.



Day 2:

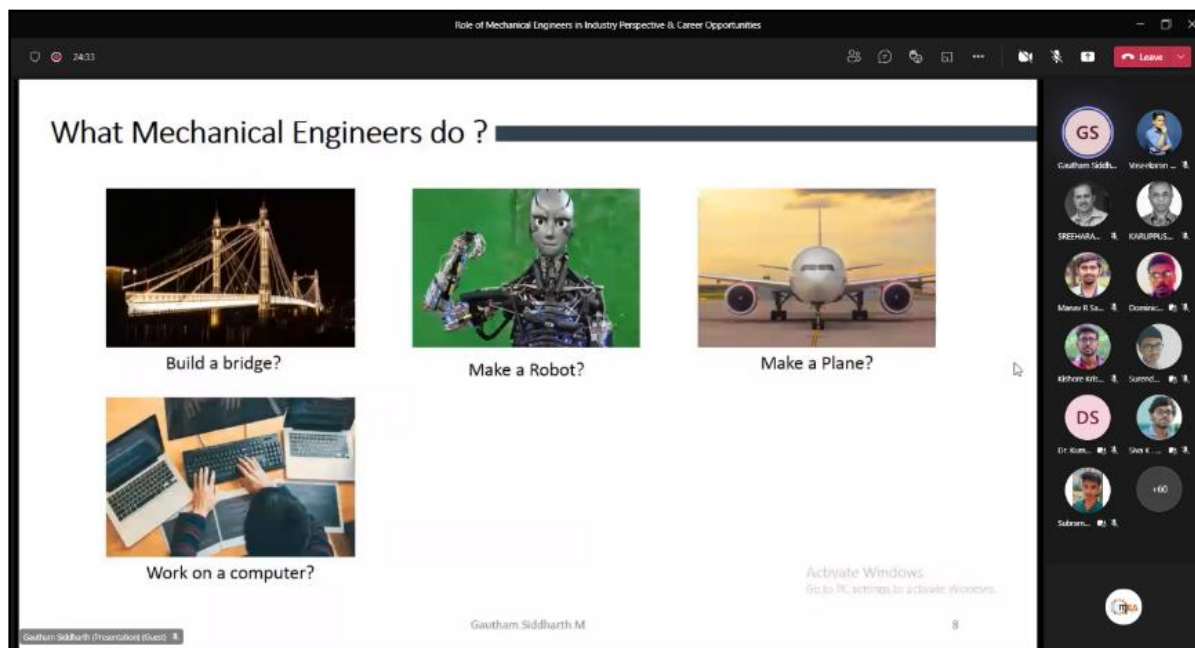
The second day began with the speaker's speech and similarly to the previous day, the students were split into breakout rooms and given a template to do their teams SWOT analysis and explain it. The students were again split into breakout rooms and were given a topic of "What is women empowerment and women freedom." This was the perspective round in which everyone had distinct perspective and finally the teams presented their team's perspective.

OUTCOME:

Students were made to unlearn and learn the personal leadership in them. It made them confident and was organized to improve their communication skills.

Webinar on Role of Mechanical Engineers in Industry Perspective & Career Opportunities

To make the participants find out the Role of Mechanical Engineers in Industry Perspective & Career Opportunities, MEA conducted a **Webinar on Role of Mechanical Engineers in Industry Perspective & Career Opportunities**.



Totally eighty-two students were registered and attended this webinar. This online seminar was organized by Dr. Karuppusamy T and Dr. Sreeharan B N in coordination with Mechanical Engineering Association. Mr. Suvanraj R, Alumni relations coordinator coordinated this online seminar from student side. This online seminar was held on 23rd January 2022 at 10:00 am via MS Teams. This Event was organized under the guidance of Dr. V R Muruganantham, AP and Mr. M A Vinayagamoorthis, AP (II).

The speaker started the session by introducing himself as KCT alumni. This session covered the wide range of topic which are very essential for the students to learn, develop and acquire. He briefly told that how to face an interview, how to build resume and he also told some names of CORE and IT companies that were recruiting in Kumaraguru College of Technology, recent past. To build resume and for career development, he suggested many new things. He also discussed what are important subjects that are needed to concentrate during placements. Then he cleared the doubts.

By this online seminar, students got an insight about how to build their resume and important topics to be revised before placement interview. By sharing his working experiences, he helped the students to plan their career in future. He asked the students to do NPTEL courses which he believed that it will be extremely useful for students in future and placements.



Mr. M. Barani, 19BME091 participated in an International Workshop on "Project management : The Basic for success from 28-11-2021 to 02-01-2022 organized by University of California, Irvine

Mr. Mohan R – (19BME017) of third year Mechanical Engineering, **Mr. Manav R Samant – (19BME006)** of third year Mechanical Engineering and **Ms. Anjana Prasad – (20BME013)** of second year Mechanical Engineering got selected in the first set of Team Sea Sakthi from KCT garage to participate in the Energy boat challenge which is going to happen at Monaco.

Team Sea Sakthi is the marine arm of a research forum on behalf KCT Garage. Students of this forum manufacture custom vehicles which represents the institution in student racing events across India, with more than fifty awards and honors to our name. Although marine is a new undertaking for Team Sea Sakthi, the students have ample experience in designing and building battery powered electrical vehicles. The team views the energy boat challenge as an opportunity to measure their ideas against the world. The challenge, in our perspective, will be an important learning and experiential milestone.



- Following students participated in a webinar titled "Embrace Global Education on your fingertips" on 29-01-2022.

- Mr. E. Rishimaran
- Ms. A. Jobisha Celin
- Mr. S. Jayabalu
- Mr. K. T. Imayan
- Mr. P. Kalaiselvan
- Mr. R. Suvanraj
- Mr. Manav R. Samant
- Mr. A. Joshua Peter
- Mr. Sreejith Ravichandran
- Mr. S. Nishanth
- Mr. S. Kishore Krisna
- Mr. A. R. Atharsh
- Mr. S. Shakeel Akthar
- Mr. S. V. Nithesh
- Mr. S. Barath Kumar
- Mr. C. R. Vidhun
- Mr. P. Prabhakaran
- Mr. S. Gideon Devairakkam
- Mr. N. Mahesh Kumar
- Mr. U. Venkatesan
- Mr. B. Hemavijay
- Mr. G. V. Ananthu Krishna
- Mr. P. Bharath Yuvaraj
- Mr. V. Vetriselvan
- Mr. K. R. Raaj Khishore
- Mr. S. Bavin Kumar
- Mr. S. L. Vaseekaran
- Mr. A. P. Chandhru

- Mr. S. Kamalesh
 - Mr. S. P. Keerthivasan
 - Mr. A. Steven Josh
 - Mr. S. Jeevananthan
 - Mr. R. Kumarasamy
 - Mr. B. Sangeethkumar
 - Mr. M. Yaswanth Raghav
 - Mr. S. Vivien Wilfred
 - Mr. S. Sabarivasan
 - Mr. K. Jeevabharathi
- Following students participated in a webinar titled “Embrace Global Education on your fingertips” on 29-01-2022.
- Mr. S. L. Vaseekaran
 - Mr. S. Kishore Krisna
 - Mr. S. Nishanth
 - Mr. U. Venkatesan
 - Mr. S. V. Nithesh
 - Mr. R. Suvanraj
 - Mr. Manav R. Samant
 - Mr. S. Surendher
 - Mr. K. Siva
 - Mr. M. Subramanian
 - Mr. C. R. Vidhun
 - Mr. S. Kamalesh
 - Mr. R. Praveen Kumar
 - Mr. B. G. Arun
 - Mr. R. Aswin Baalaje
 - Mr. E. Girish Kumar
 - Mr. Sreejith Ravichandran
 - Mr. S. B. Shyam
 - Mr. M. Vijay
 - Mr. M. Thiruchitrambalam
 - Mr. P. Abiram
 - Mr. M. Tamil Selvan
 - Mr. J. Dominic Savio.
 - Mr. R. Nikil
 - Mr. K. T. Imayan
 - Mr. M. Gokulakrishnan
 - Mr. K. V. Vijayadithya
 - Mr. S. Vijay Ganesh
 - Mr. R. Ravi Ragul
 - Mr. George John Panicker
 - Mr. A. D. Sanjai Kumar
 - Mr. S. Abhinandan
 - Mr. T. Nandhakishore
 - Mr. A. Varun
 - Mr. D. Dinesh Kumar
 - Mr. P. Prabhakaran
 - Mr. E. Mohind
 - Mr. R. Tamil Bharathi
 - Mr. M. Obli Karthi
 - Mr. G. G. Naveen
 - Mr. R. Lokeswaran
 - Mr. J. Steve Leo
 - Mr. S. Shakeel Akthar
 - Mr. S. Ananth
 - Mr. A. Kishore
 - Mr. A. Charunika
 - Mr. P. Balavignesh
 - Mr. S. Jayabalu
 - Mr. C. Sujith
 - Mr. GV. Guruu Prashanth
 - Mr. G. Jaswanth Kumar
 - Mr. C. Ashok Kumar.
 - Mr. K. R. Raaj Khishorre
 - Mr. M. Surenter
 - Mr. M. Subeesh
 - Mr. G. Ajith Kumar
 - Mr. R. Kanishkar
 - Mr. N. Karthic
 - Mr. R. Praveen
 - Mr. K. V. Ashwinth
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 - Mr. G. Dharnidhar
 - Mr. V. Aakash Kumar
 - Mr. R. Sanjay
 - Mr. M. Nandeesh
 - Mr. K. Hariharan

REACH FOR THE STARS!



F/C R S Tarun
II Year Mechanical

I am a great believer in luck, and I find the harder I work, the more I have of it.

Who would have thought that just giving a small try in the RDC selections might end up in meeting the honourable Prime Minister of India?

The Republic Day camp has always been a 'dream to achieve' for every NCC cadet and with immense pride, I can say that I have achieved it. In this blog, I will share my unforgettable RDC experience in Delhi.

From having fears of attending the first unit selection to representing the TN, P & AN directorate in the prestigious Republic Day camp held at Delhi, this has undoubtedly been the best experience of my life. Even though we primarily went for highlighting our drill, we learnt a lot of life skills in the process of it. We got the chance to interact with cadets from all over the country. The exposure to different environment and climate taught us how to adapt to changes.



Warming up in temperature of about 6 degrees was never that easy. So, we were made to go through all sorts of ragada and tagada to warm up ourselves before we start the practice. But we never felt it hard because we enjoyed every moment of it and did it as a team. We were lucky enough to see some of the best tanks and helicopters of Indian army and special activities like paragliding, which we have never seen in our lifetime, during the prime minister's rally.

The neatness in our room reflects our discipline and discipline being the motto of NCC, our priority was to maintain our barrack and building exceptionally clean and decorated. Work would start exceedingly early in the morning, sometimes at 3 30 am in the freezing cold of Delhi. I was a part of the core line area team. A picture-perfect room is expected from us every day before going to the parade and we also met the expectations. We were made to do all sorts of works including painting, stitching, gardening, cleaning, etc.

My RDC journey will be incomplete without mentioning about the bond created with my co cadets. Here, everyone should be a team player. That was the open secret for winning. For 2 months, we led a regimental life which was disciplined and everything we did was under the laid-out schedule. I also did choreography for a dance which was presented before the dignitaries of the camp during the Pongal celebrations.

We were incredibly lucky to meet VIPs like Prime Minister, Defence Minister, and Director General NCC in Delhi and the Governor with the DDG in Chennai. We also had the chance to interact with them.

I thank the support of my parents, staff, seniors, and the college administration without whom, I would not have achieved this feat. The neatly ironed blue uniform, DMS boots, SLR rifle along with the discipline this journey has taught me has become a part of my life. The Badge on my uniform can never be bought, it is earned through months of sweat and hard work. I am sure that my journey will inspire many to work hard and train for the prestigious Republic Day Camp.



Jai hind!



Yamaha Fazzio



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Introduction:

Yamaha, a Japanese automaker has launched its Fazzio Hybrid – connected scooter in Indonesia. It is not sure that this same would be launched in India, and it has its resemblance vehicle in India named as “Fascino.”

Fazzio:

In INR, its price is around Rs. 1.12 Lakhs, which comes in two different variants (Neo and Lux), and has six colour options, where four are with distinct colours and other two comes with shades.



The most attractive thing is their superb catchy design. It has a full digital instrument cluster, and a beautiful round headlamp and attractively positioned turn indicators. Overall, the front looks really stunning in design. Side gets a square panel along with a single saddle. Coming to the rear part, the taillights are positioned vertically including the turn indicators. Additionally, the shades given to the floormat, rear-view side mirrors, alloy wheels and the muffler, gives a great appearance to the scooter.

Features:

It is really a practical scooter with a massive under-seat boot space of nearly 17.8 Litres. They also give add-on for hangers to avail more carrying capacity. They are really loaded with features like Bluetooth connectivity and has the company's app called as "Yamaha's Y - app connect," phone charging socket, keyless lock/unlock. The look of the fully digital cluster is really a stunning one.

Transmissions:

It comes with a front conventional telescopic fork, and a mono shock absorber at the rear. It has a hydraulic front disc brakes and a mechanical rear brake. It comes with a beautiful 12-inch alloy wheels with tubeless tyres. It has a fuel tank capacity of 5.1 litres.

It gets a 124.88cc, single cylinder engine. It gives a power output of about 8.3 bhp at 6,500 rpm and a torque of 10.6 Nm at 4,500 rpm which is connected to rear wheels through CVT, belt drive. The advanced hybrid tech has a Smart Motor Generator, which boost up the torque during initial acceleration.

It has engine start/stop engine to reduce noise and improve mileage efficiency during idle time. This gives an average mileage of 39 to 45 kmpl as claimed by the company.



**KUMARAGURU**
college of technology

COIMBATORE – 641 049

Department of Mechanical Engineering**INSTITUTE VISION:**

The vision of the college is to become a technical university of International Standards through continuous improvement.

INSTITUTE MISSION:

Kumaraguru College of Technology (KCT) is committed to providing quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic, and social development of India. The College pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set students on the path to leadership.

DEPARTMENT VISION:

To emerge as a centre, that imparts quality higher education through the programme in the field of Mechanical Engineering and to meet the changing needs of the society.

DEPARTMENT MISSION:

The department involves in sustained curricular and co-curricular activities with competent faculty through teaching and research that generates technically capable Mechanical Engineering professionals to serve the society with delight and gratification.

B. E. MECHANICAL ENGINEERING**PROGRAM EDUCATIONAL OUTCOMES (PEO's):**

- PEO 1 :** Graduates will take up career in manufacturing and design related disciplines.
- PEO 2 :** Graduates will be involved in the execution of Mechanical Engineering projects.
- PEO 3 :** Graduates will take up educational programme in mastering Mechanical sciences and management studies.

PROGRAM OUTCOMES (PO's):

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **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.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
6. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
7. **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.
8. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
9. **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **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.
12. **Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSO's):

1. Apply the fundamentals of science and mathematics to solve complex problems in the field of design and thermal sciences.
2. Apply the concepts of production planning and industrial engineering techniques in the field of manufacturing engineering.

M. E. INDUSTRIAL ENGINEERING**PROGRAM EDUCATIONAL OBJECTIVES (PEO's):**

- PEO 1 :** Graduates will be mid to higher level management / engineering professionals with responsibilities in engineering management, data analysis and business operations.
- PEO 2 :** Graduates will be engineering professionals, and technology leaders who would manage such functions as plant engineering, production, supply chain and quality management.
- PEO3 :** Graduates would function as educators or researchers in academic institutions.

PROGRAM OUTCOMES (PO's):

- P01 :** An ability to independently carry out research /investigation and development work to solve practical problems.
- P02 :** An ability to write and present a substantial technical report/document.
- P03 :** Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

PROGRAM SPECIFIC OUTCOMES (PSO's):

- PS01 :** Graduates able to apply the engineering management and data management concepts in industrial engineering areas.
- PS02 :** Graduates able to apply industrial engineering skills and knowledge to manage the functions of production and supply chain management.