

# Jyothi Engineering College

Reaccredited with NAAC (Grade A) and NBA Programmes\*

Approved by AICTE and Affiliated to APJ Abdul Kalam Technological University

A CENTRE OF EXCELLENCE IN SCIENCE AND TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

JYOTHI HILLS, VETTIKATTIRI P.O., CHERUTHURUTHY, THRISSUR, 679531 | Ph. +91 4884 259000 | info@jecc.ac.in | www.jecc.ac.in



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## DEPARTMENT OF MECHATRONICS ENGINEERING

### NEWS LETTER

As the HOD,

I am delighted to present the latest edition of our newsletter, which reflects the vibrant academic and extracurricular activities within the Department of Mechatronics Engineering at Jyothi Engineering College. Our commitment to academic excellence is evident through our dedicated faculty, state-of-the-art laboratories, and the outstanding placement records of our graduates. This semester has been particularly enriching, with numerous co-curricular and extracurricular events providing platforms for our students to showcase their talents and apply their knowledge practically. I extend my heartfelt gratitude to our faculty and staff for their unwavering dedication, and to the editorial team for their efforts in bringing this newsletter to fruition. Together, we continue to strive for excellence and innovation in all our endeavors.



**Dr. Anooa Jose Chittilappilly**  
HEAD OF THE DEPARTMENT

#### VISSION

Create eminent and ethical leaders committed to their profession and society in the field of Mechatronics through quality professional education to excel in industrial automation and innovation.

#### MISSION

- To impart orientation and to meet the challenges of the modern industry and provide motivation for research.
- To provide quality education to create graduates with professional and social commitment.



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## Brief Note :-

Mechatronics engineering is a collaborative amalgamation of the various fields of engineering. Thus forming an interdisciplinary branch of engineering that focuses on the engineering of electronic, electrical, computer and mechanical engineering systems and also includes a combination of robotics, telecommunications, systems, control and product engineering.

## Departmental Activities

### Mechatronics Engineering Department Conducts Successful Advisory Meeting

The Mechatronics Engineering Department successfully conducted its Advisory Meeting on July 25, 2024, bringing together esteemed academicians and industry experts. The session featured Dr. Giby Jose, Associate Professor & HoD (ECS), SJCTET, as the external academician, and Mr. Gireesh K P, Assistant Engineer, KSEB, as the industry representative.

Discussions focused on curriculum enhancements, industry-academia collaboration, and the integration of emerging technologies in mechatronics education. The expert panel provided valuable insights to align academic programs with industry trends, ensuring students are equipped with cutting-edge skills.

### Expert Talk on "Current Trends in Industry and Job Market" Organized by MRE Department

The Department of Mechatronics Engineering (MRE), in association with MESA, successfully organized an expert talk on "Current Trends in Industry and Job Market" on August 12, 2024. The session was led by Er. Sony Antony, who provided





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deep insights into the evolving industrial landscape, emerging technologies, and career opportunities in the mechatronics domain.

Students actively engaged in discussions on industry expectations, skill development, and future job prospects. The session proved to be highly beneficial in guiding aspiring engineers toward industry readiness.



## Introductory Session on PLC for S5 Students

The Department of Mechatronics Engineering conducted an Introductory Class on Programmable Logic Controllers (PLC) for S5 students on August 5, 2024. The session aimed to provide foundational knowledge on PLC programming, industrial automation, and control systems.

Students were introduced to the basics of PLC architecture, ladder logic programming, and real-world applications in manufacturing and automation. The interactive session laid a strong

foundation for students to explore advanced automation technologies in their academic and professional journey.



## MoU signed with Government Polytechnic College, Kalamassery



The Department of Mechatronics Engineering, Jyothi Engineering College (JEC), has signed a



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Memorandum of Understanding (MoU) with Government Polytechnic College, Kalamassery on August 22, 2024. This collaboration facilitates an internship program on Industrial Automation, offered by the prestigious Bosch Rexroth Centre of Competence in Automation and Technology. The partnership aims to provide hands-on training for students, bridging the gap between academia and industry. Through this initiative, students will gain

practical exposure to advanced automation technologies, enhancing their skills and employability in the evolving industrial sector.

## Two-Week Internship in Industrial Automation for s7 MRE students

The S7 Mechatronics Engineering (MRE) students of Jyothi Engineering College have commenced a two-week internship on Industrial Automation from August 13 to August 23, 2024 at the Bosch Rexroth Centre of Competence in Automation and Technology, Government Polytechnic College, Kalamassery. This intensive training program provides students with hands-on experience in PLC programming, industrial robotics, motion control, and smart automation technologies. The internship aims to equip students with industry-relevant skills, preparing them for careers in modern automation and manufacturing sectors.



## Mechatronics Engineering Department Celebrates Teacher’s Day with Grandeur



The Department of Mechatronics Engineering, in association with MESA, ISTE Student Chapter KE058, ISTE Faculty Chapter KE045, NSS Unit 140, IIC, and IEDC, organized a heartfelt Teacher’s Day celebration on September 5, 2024, at 8:45 PM in the Administrative Block. The event was dedicated to honoring the unwavering commitment and invaluable contributions of the faculty members. Through heartfelt speeches, student tributes, and token appreciations, the celebration recognized the pivotal role of educators in shaping academic excellence and personal growth. The event fostered a spirit of gratitude and camaraderie among students and faculty alike.



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## Expert Talk on “Innovation/Prototype Validation – Converting Innovation into a Start-up”

The Department of Mechatronics Engineering, as part of its MoU initiative, organized an expert talk on “Innovation/Prototype Validation – Converting Innovation into a Start-up” in association with MESA, IIC, and IEDC. The event was held on Monday, September 6, 2024, at 2:30 PM in the MRE Seminar Hall.

DEPARTMENT OF MECHATRONICS ENGINEERING

A TALK ON **INNOVATION/PROTOTYPE VALIDATION**

CONVERTING INNOVATIONS INTO STARTUP

**Mr. ABHIJITH S**  
Sr. ROBOTICS ENGINEER  
UNIQUE WORLD ROBOTICS

**MRE SEMINAR HALL**

**2:30 PM**

**6TH SEP 2024**

The session commenced with a warm welcome by Dr. Anand Krishnan N, Associate Professor, MRE, followed by an inaugural address by Dr. Anopa Jose Chittilappilly, Associate Professor & HoD, MRE. Mr. Jinesh KJ introduced the esteemed speaker, Mr. Abhijith S, Senior Robotics Engineer at Unique World Robotics, who shared valuable insights on

innovation, prototype validation, and transforming ideas into successful start-ups.

Students from S3, S5, and S7 actively participated in the session, gaining knowledge on entrepreneurial pathways, funding opportunities, and technological advancements in robotics and automation. The event served as an inspiring platform for aspiring innovators in the department.



## Online SIH Orientation Program Conducted by Mechatronics Engineering Department

The Department of Mechatronics Engineering, in association with the Innovation & Entrepreneurship (I&E) Cell, successfully organized an online Smart India Hackathon (SIH) Orientation Program on September 10, 2024.

The session aimed to familiarize students with the SIH competition structure, problem statements, team formation, and project submission guidelines. Experts provided insights on innovation, problem-



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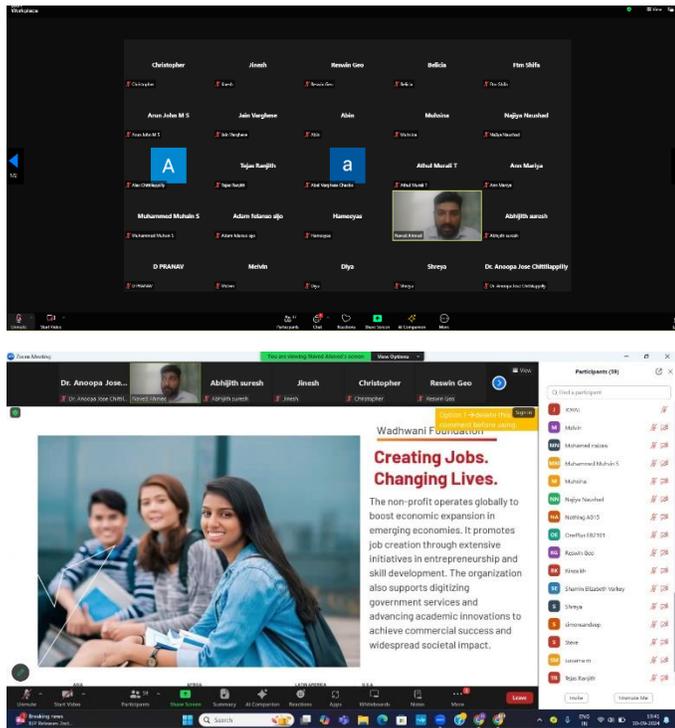
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solving approaches, and strategies to enhance their chances of success in the national-level hackathon. The program encouraged students to leverage their technical skills and creativity to develop innovative solutions, fostering a spirit of entrepreneurship and innovation within the department.



## Thrilling Bike Stunt Event “FMX – FREE STYLE MOTO STUNT” Electrifies Tharang 2024

The Department of Mechatronics Engineering successfully organized an adrenaline-pumping Bike Stunt Event, “FMX – FREE STYLE MOTO STUNT”, as part of Tharang 2024 on Thursday, October 3, at the Alumni Corner. The electrifying event was hosted by

Fr. Thomas Kakkassery, Executive Manager, JEC, and Dr. Jose P Therattil, Principal, JEC.



The highlight of the event was the jaw-dropping performances by Team DBZ, a group of professional stunt riders from Kannur, Ernakulam, and Bangalore. The team, consisting of four riders and two guide riders, showcased breathtaking high-flying tricks, jumps, and acrobatic maneuvers, thrilling the audience. Modified bikes such as KTM 390, Apache RTR, and Honda Dio were part of the action, adding to the excitement. Originally scheduled for 10:00 AM, the event commenced at 10:30 AM due to minor adjustments and concluded successfully at 11:30 AM, leaving the crowd in awe. The event was a spectacular display of skill, precision, and daring stunts, making it one of the most exhilarating highlights of Tharang 2024.

## Mechatronics Engineering Department Illuminates Tharang 2024 with Spectacular Light Show

The Department of Mechatronics Engineering orchestrated a mesmerizing Light Show as part of Tharang 2024, held on Wednesday, September 2,



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and Thursday, October 2, 2024, in the S7 MR classroom (WAB 304). The event was inaugurated by Dr. Anoop Jose Chittilappilly, Head of the Department of Mechatronics Engineering.



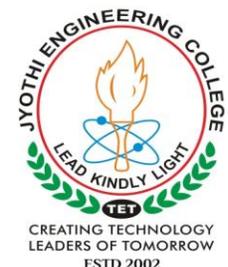
Attendees were captivated by an array of advanced lighting technologies, including a LED cube and a 3D hologram fan, which created an immersive visual experience. The showcase featured various lighting systems such as neon lights, strip lights, fairy lights, and string lights. Notably, the string lights were configured to display a 3D model, complemented by a scaled version created using a 4x4 LED cube. This LED cube, controlled by an Arduino UNO, was programmed to project intricate 3D designs, demonstrating the potential for dynamic visual displays. The event highlighted the innovative spirit and technical prowess of the department, leaving a lasting impression on all attendees.

## “Eureka Idea Pitching” Competition Sparks Innovation at Mechatronics Engineering Department

The Department of Mechatronics Engineering, in collaboration with the Mechatronics Engineering Association (MESA), ISTE Student Chapter (KE 058), IEDC, and E-Cell JEC, successfully organized the “Eureka Idea Pitching” competition on Wednesday, October 2, 2024, at 9:30 AM in the Fablab. The event commenced with a warm welcome by Dr. Anoop Jose Chittilappilly, Associate Professor and Head of the Department of Mechatronics Engineering. The program was inaugurated by Dr. Jose Kannampuzha, Academic Director of Jyothi Engineering College, who delivered an inspiring inaugural speech.



Mr. Jinesh KJ provided an overview of the competition, setting the stage for the participants. A total of 14 teams registered and showcased their innovative ideas during the pitching session. The event concluded with the distribution of participation certificates and prizes to the students,



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recognizing their creativity and entrepreneurial spirit. This initiative reflects the department's commitment to fostering innovation and providing platforms for students to transform their ideas into potential ventures.

### EDITORIAL BOARD

Staff Editor : Mr. Jain Varghese, Asst. Professor,  
Dept. of Mechatronics Engineering

Student Editor : Mr. Melvin Alex,  
Mechatronics Engineering (2021-2025 Batch).

**MECHATRONICS ENGINEERING IS THE FUTURE OF ENGINEERING.  
BE A PART OF IT AND BE THE COMPLETE ENGINEER OF TOMORROW**