





Courses Offered B.E. Mechatronics & Ph.D.

# DEPARTMENT OF MECHATRONICS ENGINEERING

## Vision

Be a globally renowned school of engineering in Mechatronics.

### Mission

- To develop ethical and competent engineers by synergizing world class teaching, learning and research.
- To establish state-of-art laboratories and to provide consultancy services to fulfil the expectations of industry and needs of the society.
- To inculcate entrepreneurial qualities for creating, developing and managing global engineering ventures.
- To motivate the students to pursue higher studies and research.

### **Department Overview**

The Department of Mechatronics Engineering, established in 2016, offers B.E. in Mechatronics and doctoral studies. It aims to produce skilled professionals for the industry, with faculty involved in research funded by agencies like DST, UGC, and AICTE. The department boasts state-of-the-art laboratories focusing on Robotics, Automation, IoT, Sensors, Thermal Management, and drones.

## **Highlights**

#### **Department Achievements:**

- The department is NBA accredited until 2027 and focuses on Robotics, with Special Interest Groups in System Integration, IoT, Sensors, Robotics, and Industrial Automation.
- Faculty have received sponsored research projects from DST, DRDO, and the Ministry of Textiles.
- Students have achieved success in competitions such as Smart India Hackathons, World Robotics Championship, SAE Baja, ISHRAE and Tamil Nadu Student Innovators Programme.

#### **Program Highlights:**

- The Mechatronics program integrates mechanical, electrical, electronics, and computer engineering, focusing on system oriented hands on approach for robotics, automation, IoT, AI, and control systems.
- The curriculum is designed for Industry 4.0, preparing graduates to work in industries like manufacturing, healthcare, automotive, aerospace, and consumer electronics.
- The program offers a strong foundation in programming, simulation, and design tools, with opportunities for research, internships, and industry collaborations to foster innovation and leadership.

## MoU's and MoA's Signed



#### **Centre for Excellence in Robotics**



**Measurements and Control Lab** 



Total Faculty strength10Faculty members with Ph.D.05Professors02Assistant Professors08

### Industry Interface

- Design and development of DC-DC charger
- Design of Bite force and Forceps pressure measurement
- Automated Simulation of Welding in RoboDK
- Al based activity Detection
- Design and development of Welding NDT Testing
- Design and development of reversible charger for electric vehicles
- Development of training kits for schools
- Course Development Nan Mudhalvan

TVS Constraints Summary Summar



**CISCO** 

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## Outstanding Infrastructures

- Centre for Robotics
- Mechatronics Workshop
- Automation Technologies Lab
- Measurements and Control Lab
- Product Development Lab
- Sensors Lab
- Modelling and Simulation Lab



Product Development lab



Automation Technologies lab



Sensors lab

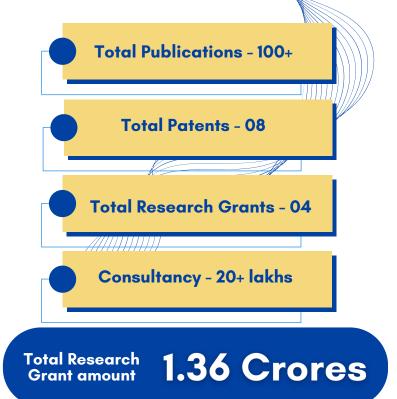
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### **Our Top Recruiters**









### **Student Achievements**

Our IV, III and II year students of drone club secured 4<sup>th</sup> place in SAEISS Autonomous Drone Development Challenge with a score of 423.5/500, 2025.





Our III year students of 2019 batch secured first prize of Rs 50,000/- in National Smart India Hackathon, Hardware Edition, 2022.

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Our IV year students of 2020 batch secured sponsorship of Rs 1 lakh in Niral Thiruvizha, TN, 2024.





### **Notable Alumni**

### **Alumni Testimonials**



**Mr. Jayasooriya Parameswaran,** 2014 - 2018 Automobile engineer, Sherpa Engineering, France



**Mr. ADP Guru Nandhan,** 2016-2020 Software Development Engineer, Amazon Robotics, Maryland, United States



**Mr. Govind Prasath,** 2016-2020 Director, Ekay and Associates Engineers Private Limited, Madurai



**Ms. Roobini Devi L R** 2019 – 2023 Development Engineer, Caterpillar, Bengaluru

### **Professional Societies & Clubs**





Indian Society of Heating, Refrigerating and Air conditioning Engineers (ISHRAE)





IAEMP Indian Association of Energy management Professionals (IAEMP)



Mr. Jitesh Shivakumar, 2014-2018 Global Head of Operations, Nibav Lifts and Elite Elevators, Chennai

As an alumnus of TCE's Mechatronics Department, I'm grateful for the support and opportunities that shaped my personal and professional growth. Guided by inspiring faculty, I developed leadership skills and a passion for innovation. Today, I serve as the Global Head of Operations, being proud of my journey. I encourage current students to embrace challenges and seek mentorship.



Mr. Muthaiah M, (2020-2024), Embedded Engineer, Johnson Electrics

I would like to express my sincere gratitude to my college and placement cell for their pivotal role in helping me secure my position as an Embedded-Motor Control Engineer at Johnson Electric. The knowledge I gained in key subjects like C Language, and Control Systems have been instrumental in my role. I deeply appreciate the efforts of my faculty, whose teachings laid a strong foundation for my career. Their guidance and expertise have shaped me into the profession I am today.



Ms. Roobini Devi L R 2019 – 2023 Caterpillar, Bengaluru

I am grateful to my college for providing continual advice in improving my communication, technical, and programming skills. I was given the chance to participate in a Caterpillar Company on-campus placement, which allowed me to demonstrate my technical expertise in a professional setting. I am incredibly grateful to my college for teaching me all facets of the workplace, which enhanced not only my professional skills but also my character and leadership abilities, and for giving me a job in a positive work-life balance.

#### Contact

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