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Courses Offered

B.E. & Ph.D. Mechanical Engineering

DEPARTMENT OF MECHANICAL ENGINEERING

Vision

"Be a globally renowned school of engineering in Mechanical Sciences"

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 fulfill 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 Mechanical Engineering, established in 1957, offers an Undergraduate Program in Mechanical Engineering accredited by the NBA since 1997. The Department has undertaken research projects funded by Defence Research and Development Organisation (DRDO), Department of Science & Technology (DST) - Science and Engineering Research Board (SERB), Department of Science & Technology (DST) - Fund for Improvement of Science & Technology Infrastructure (FIST), University Grants Commission (UGC), All India Council for Technical Education (AICTE) - Research Promotion Scheme (RPS), All India Council for Technical Education (AICTE) - Nodernisation and Removal of Obsolenscence (MODROBS), Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE), and Tamil Nadu Energy Development Agency (TEDA).

Department Highlights

The department is backed by highly qualified and experienced faculty and has research facilities with sophisticated equipment to carry out research in the areas of Rapid Prototyping, Reverse Engineering, CAD, CAM, Robotics, Machine Vision, Nanotechnology, Refrigeration & Air Conditioning, Automotive Engineering, CFD, Composite Materials and Industrial Engineering.

The department adopted Outcome-Based Education in the academic year 2014-15 and integrated the Conceive Design Implement Operate (CDIO) framework in 2018, enhancing curriculum design and teaching methods. In 2019, the department, in collaboration with TVS Motors Ltd., established the TCE-TVS Centre for Automotive Research. This industry-sponsored research centre is equipped with advanced machines, instruments, and test rigs, following Japanese Total Quality Management (TQM) principles.

Programme Highlights

- Each semester's curriculum includes up to six theory courses and three practical courses, with a maximum of nine courses in total.
- The medium of instruction, exams, and project reports are in English, and innovative teaching methods are employed by faculty.
- Students can engage in Special Interest Groups (SIGs) for research or join racing teams to gain practical experience in vehicle design and development.
- The B.E. program in Mechanical engineering lasts eight semesters for regular students and six semesters for lateral entry students, with each semester comprising 90 working days.

Centre of Excellence

TS Srinivasan Centre for Automotive Research (TSSCAR)



Faculty Achievements

- Prof. A. Valan Arasu received his Post Doctoral (Boyscast Fellowship) at the National University of Singapore
- Prof. K. Srithar received his Post Doctoral Fellowship at Australian National University, Canberra, and received the Endeavour Executive Award and Australian Ambassador from the Australian Government
- Prof. S. Karthikeyan received the award for exceptional contribution as a primary evaluator in "Toyathon" by AICTE & Ministry of Education **Innovation Cell**
- Prof. K. Srithar and Prof. A. Valan Arasu are listed in the Stanford University's World's Top 2% scientists

11

76

Books and Chapters

Citations overall

h-index

Patents - 13

Total

Publications

Grants - 14

Alumni Strength - 5525



Professional Membership & Societies



Department Laboratories

- Production systems support laboratory
- CFD laboratory
- I.C. engines laboratory
- Nanotechnology laboratory
- Carpentry section
- Fitting shop
- Machine shop
- Instrumentation & dynamics laboratory
- Product engineering laboratory
- Centre for electronic product testing
- Welding & sheet metal shop
- Cam laboratory
- Foundry & smithy shop
- Heat transfer laboratory
- Steam power laboratory
- Refrigeration & Air conditioning laboratory
- Metrology laboratory
- Metallurgy & composite materials laboratory
- Project laboratory



Heat **Transfer Lab**

Production Systems Support Lab

Our Top Recruiters







Salary packages

Highest - 13LPA Average - 10LPA Lowest - 6.5LPA

Notable Alumni



Padma Bhushan Er. S. Nambi Narayanan *ISRO - Scientist* 1965- Mechanical

Padma Shri Er. N. Vedachalam ISRO - Scientist 1964-Mechanical



Padma Shri Er. V. Gnanagandhi ISRO - Scientist 1968 - Mechanical

Dr. R. Venkatraman Former Associate Director, Satish Dhawan Space Centre SHAR (SDSC SHAR) 1984- Mechanical



Mr. Ajayan Sahadevan Global Board of Directors Oldendorff Carriers, Dubai 2002 - Mechanical

Mr. I A S Balamurugan Managing Director, Anicut Capital LLP, Chennai 1991-Mechanical



Dr.C. Mathiazhagan Chairman & CEO Hi-Tech Company Software Solutions, Chennai 1984-Mechanical

Alumni Testimonials



Mr.M.P. Balaji Batch - 2016

TCE has profoundly shaped my career through its supportive academic environment, expert faculty, and enriching extracurriculars. The holistic growth I experienced here, along with ongoing placement support, continues to benefit me professionally.

Co-curricular activities



TCE Motorsports



Prometheans



Eureka



Yukta Racing



Mr. M. Rishidev Batch - 2019

TCE has been pivotal in shaping my career, nurturing my academic, ethical, and leadership growth through inspiring faculty, vibrant peers, and unforgettable experiences. The lessons and memories from my time there will always hold a special place in my heart.

Contact Dr. K. Srithar Professor & Head Email: hodmech@tce.edu Phone: 9842185302



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