



DEPARTMENT OF AUTOMOBILE ENGINEERING

PROGRAMS

B.E. AUTOMOBILE ENGINEERING

B.E. MECHANICAL ENGINEERING (AUTOMOBILE)



AutoXploR

**DECEMBER'24,
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EDITORIAL BOARD

Editors



Dr. J. Venkatesan
Professor & HoD



Mr. R. Sakthivel
Assistant Professor



Dr. K. Paul Durai
Assistant Professor



Mr. M.R. Kaleeswaran
IV Year AUT

Students



Mr. V. Shivababalaj
III Year AUT

DEPARTMENT VISION & MISSION

Vision

To be recognized as a distinguished department renowned for producing competent and responsible mechanical engineers specialized in automobile engineering, meeting the dynamic demands of automotive industries on national and global scale, nurtured by exceptional facilities and support.



Mission

- Igniting the passion of individuals for learning, research, and innovation by establishing collaborative learning through dynamic teaching methodologies, hands-on experiences, and research opportunities, to contribute in the advancement of automotive technologies.
- Advancing the competency of individuals through comprehensive academic curriculum, state-of-the-art-laboratory facilities, and training on critical thinking skills to comprehend industry requirements and provide innovative solutions in the automotive and associated domains.
- Providing engineering and technological solutions for challenges such as sustainability, safety, and efficient transportation at national and global levels, through interdisciplinary collaboration, and cutting-edge research in collaboration with industry partners, government agencies, and academic institutions.

INDUSTRY COLLABORATION

Dr. J. Venkatesan, Professor & Head, Dr. K. Paul Durai, Assistant Professor/AUT and **Dr. S. Suseel Jai Krishnan Assistant Professor/MEC** visited Sundram Fasteners Limited, Mahindra World City, and discussed with **Dr. S. Ramesh, Executive Vice President, Mr. V. Viswanthan, General Manager** and **Mr. D. Vetrichelvan, General Manager, Sundram Fasteners Limited** regarding the “Semester-in-Industry Programme” planned for the VI semester students of B.E. Automobile Engineering, B.E. Mechanical Engineering and B.E. Mechanical Engineering and Automation.

The meeting was held on December 06, 2024 at Sundram Fasteners Limited. The industry experts highly appreciated the efforts taken by SVCE for the programme.



FACULTY CONTRIBUTIONS

Mr. J. Dhanabal, Assistant Professor participated in the event "Creating a Mentoring Movement," organized by BYST on December 27, 2024 at Madras Management Association (MMA). New No:240, Pathari Rd, Anna Salai, Chennai - 600006.



FACULTY CONTRIBUTIONS

Guest Lecture Delivered

Dr. V. Ganesh, Associate Professor, has delivered a lecture during Two Day Workshop on Recent Trends in Automotive vehicles(RTAV 2024) during December 11, 2024 and December 12 2024 organized by Department of Mechanical Engineering at Sri Venkateswara College of Engineering.



FACULTY CONTRIBUTIONS

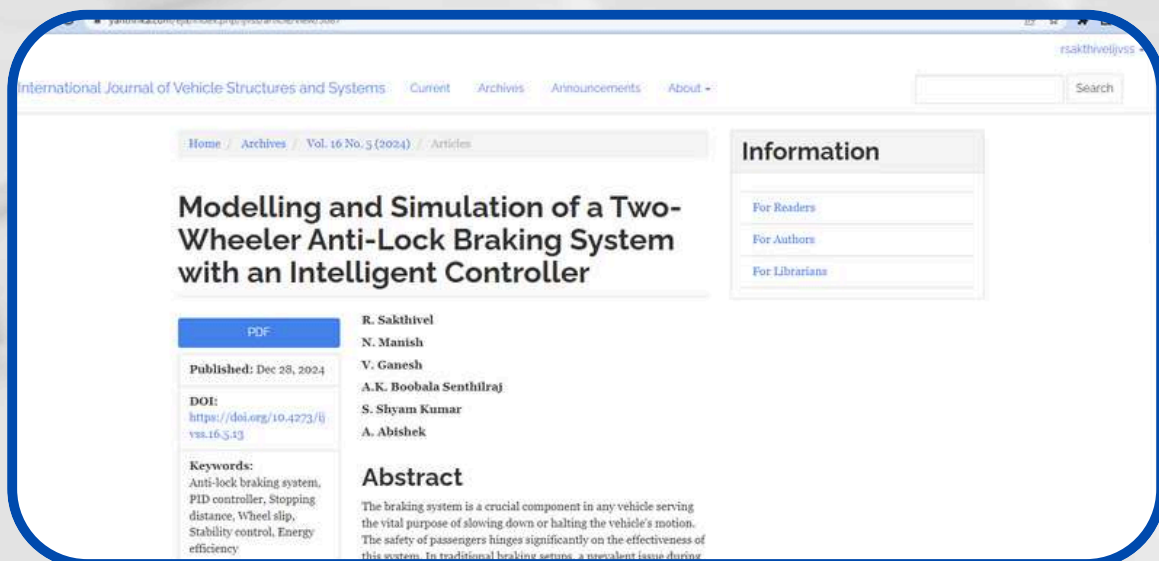
Dr. RAMANJANEYULU KOLLA, Assistant Professor has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on “AI in Hydrogen and Electric Powered Vehicles” at B S Abdur Rahman Crescent Institute of Science and Technology from December 09, 2024 to December 14, 2024.



FACULTY CONTRIBUTIONS

Paper Publication

Dr. V. Ganesh, Mr. R. Sakthivel, Mr. A.K. Boobalasesenthilraj along with our 2024 passed out students Mr. Manish, Mr. Abishek and Mr. Shyam Kumar have published a technical paper titled “Modelling and Simulation of a Two-Wheeler Anti-Lock Braking System with an Intelligent Controller” in International Journal of Vehicle Structures and Systems (IJVSS), 16(5), 719-722I, ISSN: 0975-3060.



FACULTY CONTRIBUTIONS

Funded Project

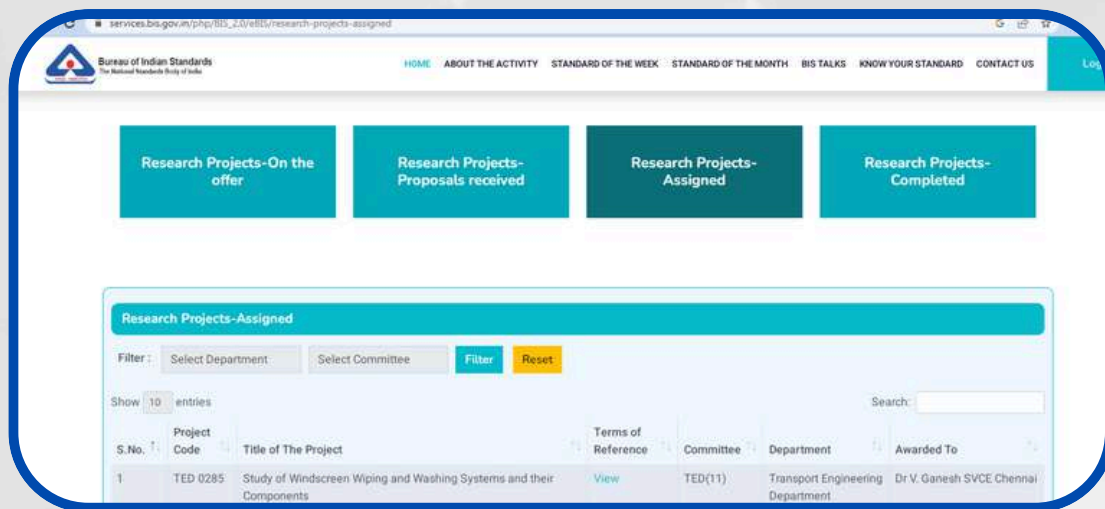
Dr. V. Ganesh, Associate Professor & A.HoD, **Mr. R. Sakthivel**, **Mr. A.K. Boobalasesenthilraj** and **Dr. Ramanjanjeyulu Kolla**, Assistant Professors from the Department of Automobile Engineering, SVCE, have successfully secured an externally funded project from the Bureau of Indian Standards (BIS).

◆ **Project Title:** Study of Windscreen Wiping and Washing Systems and their Components

◆ **Sanctioned Amount:** ₹9.30 Lakhs

◆ **Funding Agency:** Bureau of Indian Standards (BIS)

This project stands as a testament to the research excellence at SVCE and highlights our commitment to advancing automotive safety standards.



The screenshot shows the 'Research Projects-Assigned' page on the BIS website. It features a navigation bar with links like HOME, ABOUT THE ACTIVITY, STANDARD OF THE WEEK, etc. Below the navigation bar are four buttons: Research Projects-On the offer, Research Projects-Proposals received, Research Projects-Assigned, and Research Projects-Completed. The 'Research Projects-Assigned' section is highlighted, showing a table with one project entry. The table has columns for S.No., Project Code, Title of The Project, Terms of Reference, Committee, Department, and Awarded To. The first row shows project TED 0285, titled 'Study of Windscreen Wiping and Washing Systems and their Components', awarded to Dr. V. Ganesh at SVCE Chennai.

S.No.	Project Code	Title of The Project	Terms of Reference	Committee	Department	Awarded To
1	TED 0285	Study of Windscreen Wiping and Washing Systems and their Components	View	TED(11)	Transport Engineering Department	Dr V. Ganesh SVCE Chennai

FACULTY CONTRIBUTIONS

Mr. C. Gnagadharan, Instructor has Successfully completed the Quality Engineer exam and received the certificate on December 09, 2024 conducted by QMSQC Industrial Training and Certificate Private Ltd.



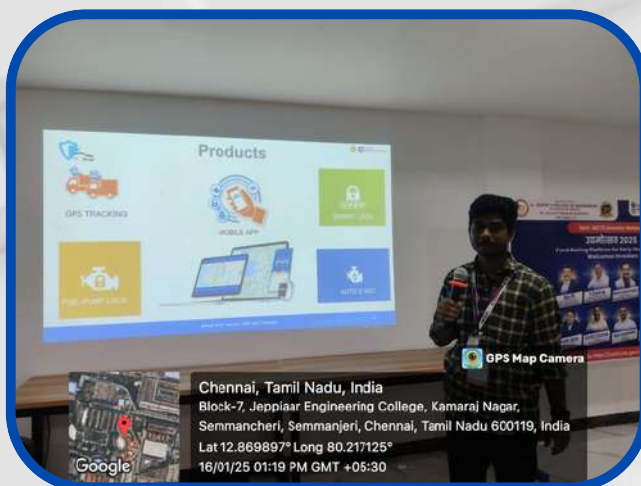
Mr. C. Gnagadharan, Instructor has participated in the webinar, "Comprehensive Framework for Institutional Academic & Administrative Excellence align with NAAC" held on December 20, 2024.



STUDENTS PARTICIPATION

Yukthi innovation

Mr. Kaviraj (III Year), Mr. Johin Gill (III Year), and Mr. Deepak Karthik (I Year), Automobile Engineering students, have submitted a startup proposal under the mentorship of Mr. R. Sakthivel and Dr. Ramanajaneyulu Kolla, Assistant Professors, on the In **Yukthi Innovation Portal for the UTYAMOTSOV - pitching event**. The proposal seeks funding for their startup, focusing on the topic 'Intelligent Vehicle Security System and Automatic Headlight Control'.



ALUMNI HIGHLIGHTS

We are proud to share that **Mr. Sudharsan Ananth (Batch 2017-21)**, Co-Founder & CTO of **OrbDoc**, had the incredible opportunity to pitch **OrbDoc** at **Alabama Founder Fest** on December 10–11, 2024, in Birmingham, USA. His pitch highlighted OrbDoc's mission to revolutionize healthcare discharge documentation, ensuring smoother transitions and better patient care.



ALUMNI HIGHLIGHTS

Mr. Vimal Prabhakaran, Alumnus (Batch 2019-23), has successfully graduated from Queen Mary University of London with a Master's in Management. His academic journey has been one of immense dedication, perseverance, and professional growth, pushing him beyond his limits to achieve this remarkable milestone.



PROGRAM OUTCOMES (POs)

Students in the Automobile Engineering program should, at the time of their graduation, be able to

1. Apply the knowledge of mathematics, science, engineering fundamentals and concepts of Civil Engineering to the solution of complex engineering problems. **(Engineering knowledge)**
2. Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences. **(Problem analysis)**
3. 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. **(Design/Development of Solutions)**
4. 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 for complex problems. **(Conduct Investigations of Complex Problems)**
5. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. **(Modern Tool Usage)**
6. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. **(The Engineer and Society)**
7. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. **(Environment and Sustainability)**
8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. **(Ethics)**
9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. **(Individual and Team Work)**
10. 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. **(Communication)**
11. 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. **(Project Management and Finance)**
12. Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change. **(Life-long Learning)**

PROGRAM SPECIFIC OUTCOMES (PSOs)

Students in the Automobile Engineering program should, at the time of their graduation, be able to

- **PSO1:** Design, analyze, and optimize automotive systems and components using principles of mechanical engineering and specialized knowledge in automobile engineering.
- **PSO2:** Integrate advanced technologies into automotive systems, including electric and hybrid powertrain, autonomous driving systems, vehicle-to-vehicle communication, and advanced driver assistance systems.
- **PSO3:** Plan, conduct, and interpret tests and experiments to validate the performance, reliability, and safety of automotive systems and components.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Automobile Engineering graduates during the first few years of graduation will:

- **PEO1:** Graduates will have acquired a strong foundation in mechanical engineering principles and specialized knowledge in automobile engineering, adapted to technological advancements leading to successful careers in the automotive and manufacturing industries.
- **PEO2:** Graduates will showcase the ability for innovation and flexibility in embracing technological progress and evolving industry dynamics, fostering a commitment to ongoing learning, culminating further academic pursuits and research endeavors.
- **PEO3:** Graduates will understand the ethical, social, and environmental implications and adhere to the principles of ethical conduct, sustainability, and corporate responsibility to become responsible professionals and successful entrepreneurs.

PROGRAMS

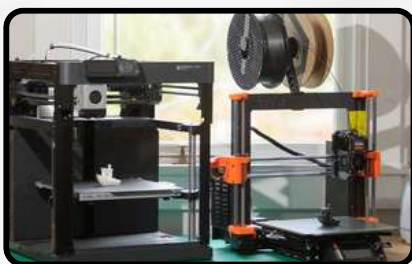
- **B.E. Automobile Engineering**
- **B.E. Mechanical Engineering (Automobile)**



B.E. MECHANICAL ENGINEERING (AUTOMOBILE)

(With a special focus on hybrid and electric vehicles)

**EARN DEGREE
WITH MULTIPLE CAREER
OPPORTUNITIES**



Why Mechanical Engineering (Automobile) at SVCE?

- **First College in Tamil Nadu** to introduce this program from the **Academic Year 2024-25**
- The College is an **ISO certified** institution and is accredited by **National Assessment and Accreditation Council (NAAC) with A+ Grade**
- Students can explore **multiple career opportunities** in leading mechanical and automobile industries in India and Abroad
- Special focus on **Hybrid & Electric Vehicles**
- **Semester-in-Abroad** programme in third year
- Exposure to real-world challenges and practices through **Semester-in-Industry** programme
- Earn **Honours / Minor degree** along with basic degree
- Guidance for 100 % placement
- **Full fee waiver** for Government School students under WINGS and SEEDS scholarship schemes
- **Management scholarships** on the basis of Merit Means, Merit-cum-Means, Economic Means, Performance in Sports and Performance in NCC activities

Honours and Minor Degree

- In addition to the basic degree B.E. Mechanical Engineering (Automobile), the students can get an additional Honours Degree or Minor Degree by earning additional credits.

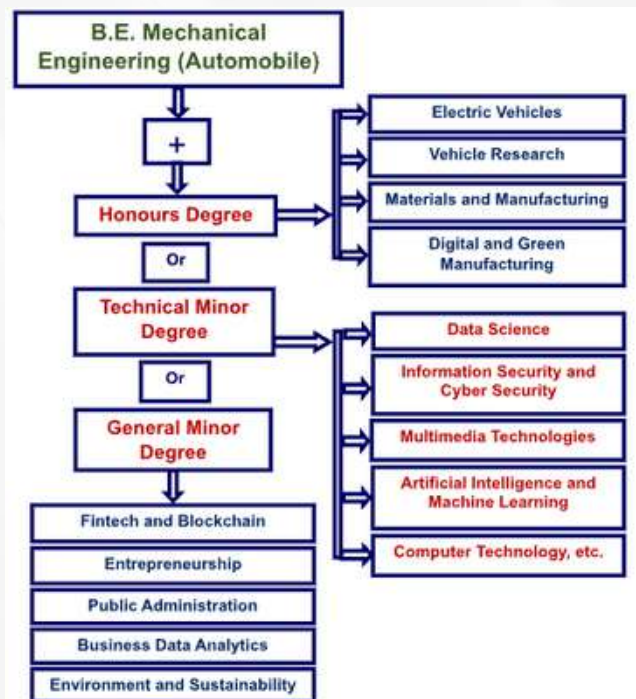
Placement

An average of more than **95%** eligible students of Automobile Engineering got placed in reputed core and other companies



Higher Studies

- Students are provided with **supportive training** pertaining to their future plans for doing a master's.
- Students pursue their master's in the field of Engineering and Technology and also in Business Administration and Management in reputed Universities worldwide including Clemson University-USA, Wisconsin Madison University-USA, RWTH Aachen University-Germany, Inglostadt University-Germany, University of Sheffield-UK, Oxford Brookes University-UK, etc.



APPLY NOW

