



DEPARTMENT OF AUTOMOBILE ENGINEERING

PROGRAMS OFFERED

B.E. AUTOMOBILE ENGINEERING

B.E. MECHANICAL ENGINEERING (AUTOMOBILE)



AUTO XPLOR

JULY '24, VOLUME 4
ISSUE 1



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EDITORIAL BOARD

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Professor & HoD

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Assistant Professor



Dr. K. Paul Durai
Assistant Professor

Students



Mr. M.R. Kaleeswaran
IV Year AUT



Mr. V. Shivabalaaj
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.

RESEARCH ACTIVITIES

FACULTY RESEARCH DAY

Faculty Research Day was organized on July 5, 2024 at SVCE. **Mr. Ramanjaneyulu Kolla** (Part-Time Research Scholar), Assistant Professor, Department of Automobile Engineering, SVCE was awarded the first prize for his presentation titled "Design and Implementation of Load Adaptive Braking System on a Two Wheeler", under the Automobile Engineering Category.

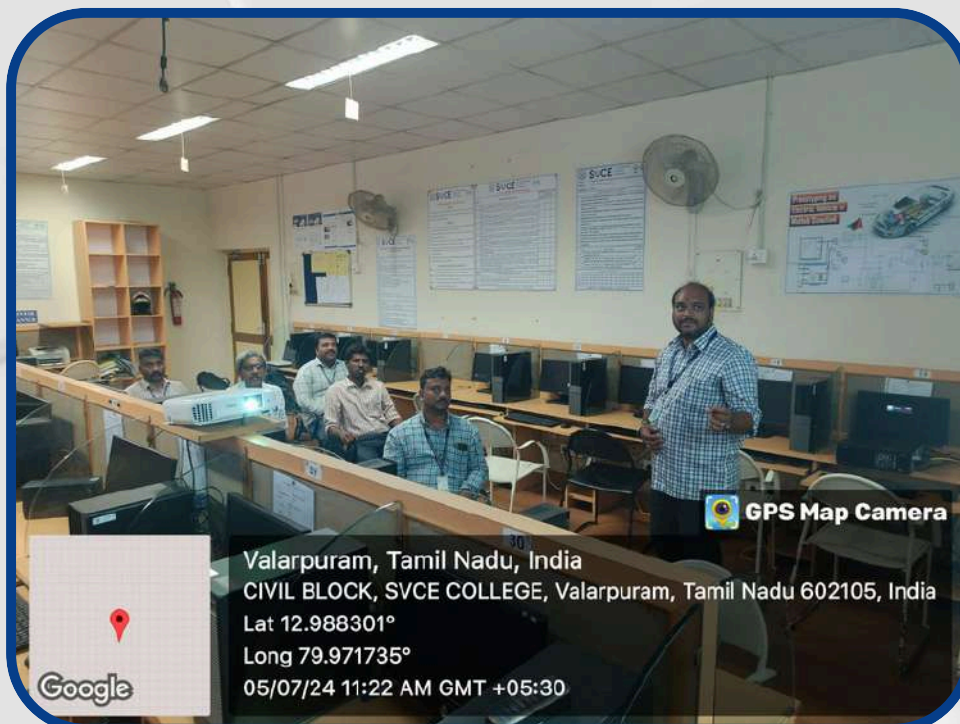


RESEARCH ACTIVITIES

FACULTY RESEARCH DAY

Other participants

- **Mr. R. Sakthivel** (Part-Time Research Scholar), Assistant Professor, Department of Automobile Engineering, SVCE, presented a paper titled "Design and Analysis of Variable Force Braking System of a Two Wheeler".
- **Mr. R. Nirmal Kumar** (Part-Time Research Scholar), Assistant Professor, Department of Mechanical Engineering, C. Abdul Hakeem College of Engineering & Technology presented a paper titled "Experimental Investigation and Exergy Analysis of CI Engine Enriched with Varying Hydrogen Intake".



RESEARCH ACTIVITIES

BIS R&D Project Proposal - Phase III:

- **Dr. J. Venkatesan**, Professor and Head, Dr. K. Paul Durai, Dr. G. Ravi, and Mr. Ramanjaneyulu Kolla, Assistant Professors from the Automobile Engineering Department have submitted a project proposal titled “Study for Reviewing Performance Requirements for Constant Speed Compression Ignition (CI) Internal Combustion Engines” (Project Code: TED 0254).
- **Dr. V. Ganesh**, Associate Professor, Mr. R. Sakthivel, Mr. A.K. Boobalasesenthil Raj, and Mr. Ramanjaneyulu Kolla, Assistant Professors from the Automobile Engineering Department have submitted a project proposal titled “Study of Windscreen Wiping and Washing Systems and their Components” (Project Code: TED 0285).

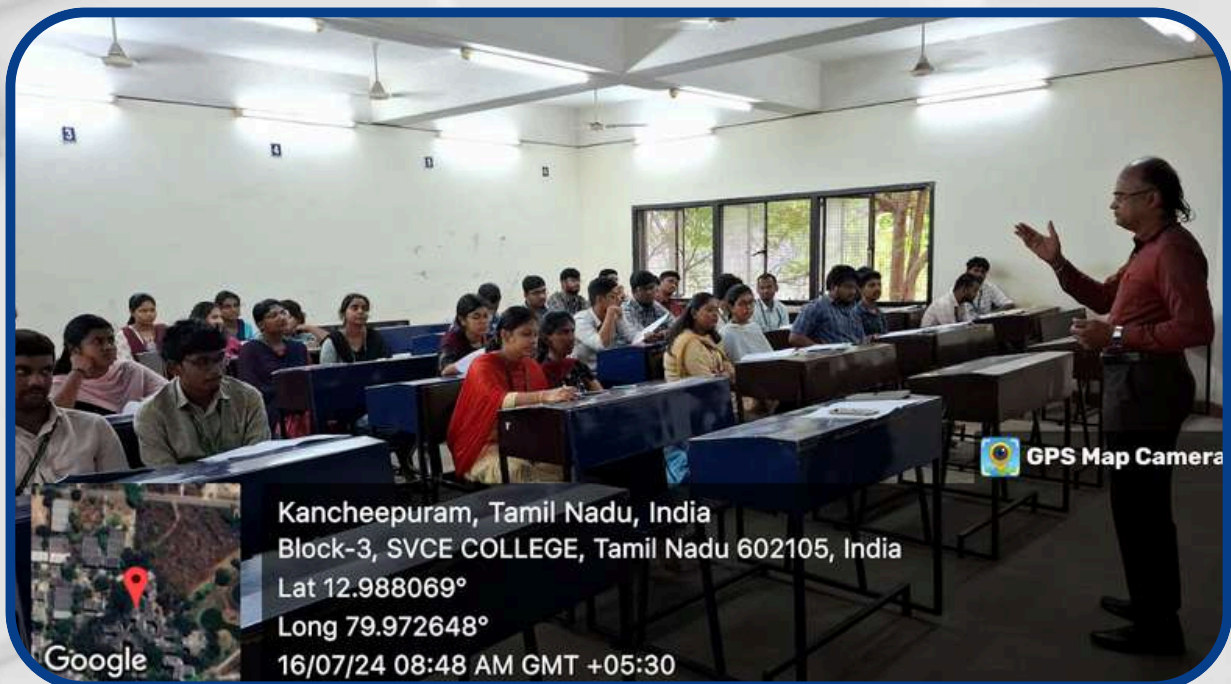
The screenshot shows the BIS R&D Project Proposal website. The header includes the Bureau of Indian Standards logo and navigation links: HOME, ABOUT THE ACTIVITY, STANDARD OF THE WEEK, STANDARD OF THE MONTH, BIS TALKS, KNOW YOUR STANDARD, CONTACT US, and Log. Below the header are three main navigation buttons: Research Projects-On the offer, Research Projects-Proposals Submitted, and Research Projects-Assigned. A red banner indicates that only members of technical committees can access the content. A red box contains instructions for submitting proposals, including the contact information for the Head of the Standards Coordination and Monitoring Department at the Bureau of Indian Standards, Manak Bhavan, 9, Bahadur Shah Zafar Marg, New Delhi - 110002. Below this is a section for 'Research Projects-On the offer' with links for FAQs, Guidelines for the R & D project, and Contact for Query. A filter section allows users to select a department and committee, with Filter and Reset buttons. A table lists the project details:

S.No.	Project Code	Title of The Project	Terms of Reference	Committee	Department	Last Date For Submission
1	TED 0285	Study of Windscreen Wiping and Washing Systems and their	View	TED(11)	Transport Engineering	2024-08-30

PROGRAMS ORGANIZED

Soft Skills Training

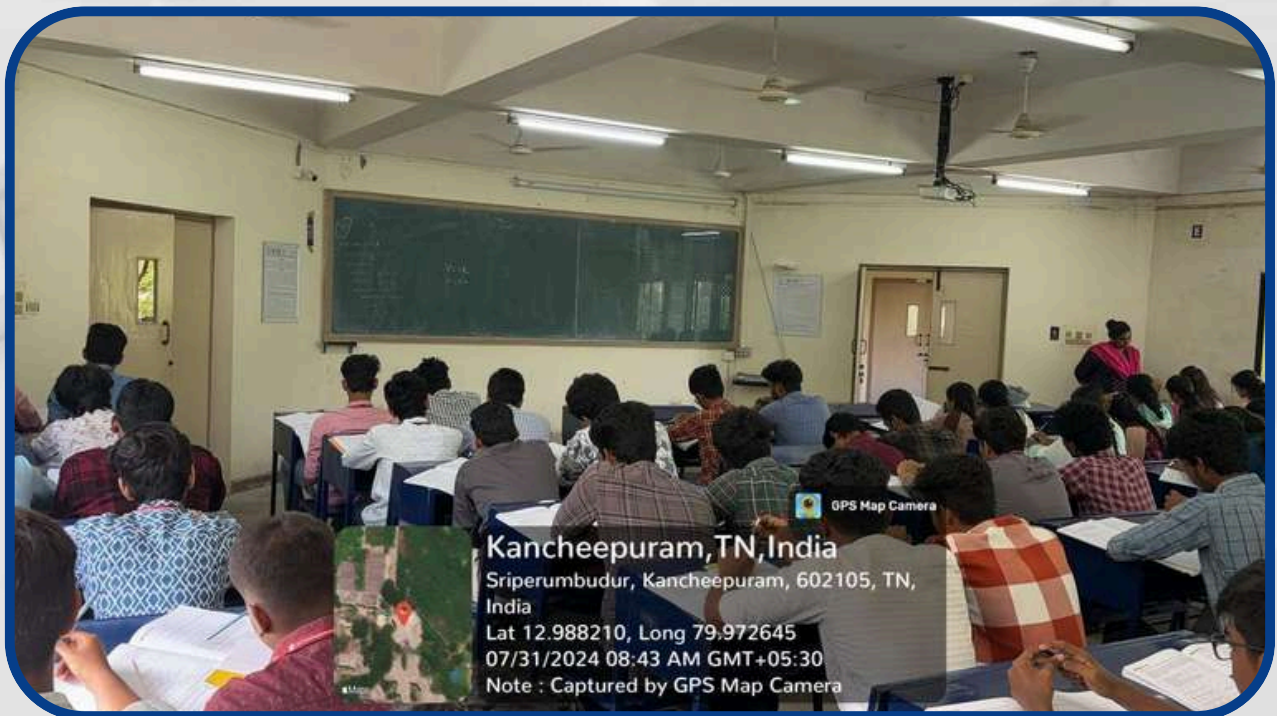
- A Soft Skill Training Program was conducted for the **VII Semester Automobile Engineering Students (2021-25 Batch)** by the Department of Training and Placement, SVCE from 15.07.2024 to 20.07.2024.
- A Soft Skill Training Program was conducted for the **V Semester Automobile Engineering Students (2022-26 Batch)** by the Department of Training and Placement, SVCE from 22.07.2024 to 27.07.2024.



PROGRAMS ORGANIZED

Soft Skills Training

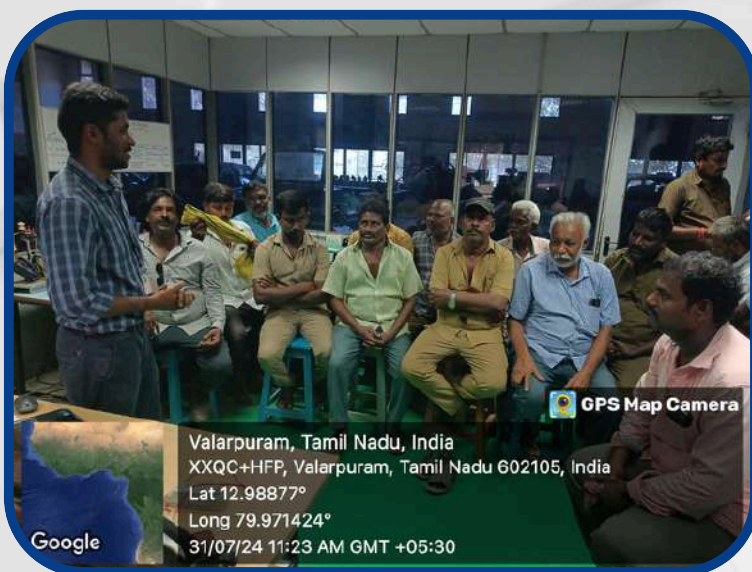
- A Soft Skill Training Program was conducted for the **III Semester Automobile Engineering Students (2023-27 Batch)** by the Department of Training and Placement from 29.07.2024 to 03.08.2024.



PROGRAMS ORGANIZED

Road Safety Awareness Programme

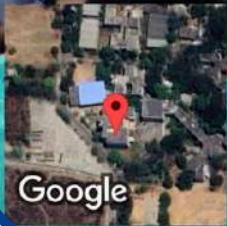
- **Mr. R. Sakthivel**, Assistant Professor delivered an insightful session on "Road Safety Awareness Programme for Riders" on July 31, 2024, in the Automobile Components Laboratory.
- The session focused on responsibilities while driving, vehicle safety, dangerous driving behaviors, safe driving techniques, and the importance of good posture while driving.



FACULTY CONTRIBUTIONS

ISO External Audit

- **Dr.S.Premnath**, ISO-M.Rep, Associate Professor, Automobile Engineering has successfully Completed the ISO 21001:2018 External Audit on July 15, 2024.



Valarpuram, Tamil Nadu, India
Department Of Biotechnology, SVCE COLLEGE, Valarpuram, Tamil Nadu 602105, India
Lat 12.987032°
Long 79.97138°
15/07/24 04:18 PM GMT +05:30

GPS Map Camera

FACULTY CONTRIBUTIONS

Kargil Vijay Diwas

- **Mr. R. Sakthivel**, Caretaker Officer of the NCC Naval Wing, SVCE organized 'Kargil Vijay Diwas 2024' on July 26, 2024. The cadets led a tree plantation drive as a tribute to the Kargil War soldiers, emphasizing their bravery and dedication. Inspiring speeches by the chief guest and the cadets highlighted the soldiers' sacrifices, fostering patriotism and national pride among the students.



FACULTY CONTRIBUTIONS

Participations

- **Dr. J. Venkatesan**, Professor & HoD, has undergone the innovation Ambassador training “Advance Level” conducted in online mode organized by MoE’s Innovation Cell & AICTE during the IIC Calendar year and received the certificate on 03-07-2024.



- **Dr. J. Venkatesan**, Professor & HoD has Successfully completed the four days training course on "Laboratory Management System as per ISO/IEC 17025:2017 & Internal Audit" conducted at The Hotel Vijay Park, Arumbakkam, Chennai during 4th - 7th June, 2024.



STUDENTS PARTICIPATION

The Department of Automobile Engineering is pleased to share the participation of our students in various events organized by the **IIC SVCE during Quarter IV.**

Strengthening IIC Linkages Session:

- Mr. Chimrala Asish (IV Year) and Mr. Arya B G (III Year) participated in the MoE Innovation Cell Live Session on “Strengthening IIC Linkages with ATLS and SICs in Schools and Framework for Providing Mentorship Guidance” on July 31, 2024.

Seminar on National Educational Policy:

- Ms. Arulmozhi Ela (IV Year) and Mr. Nataraj R (III Year) participated in the seminar on “Relevance of National Educational Policy (NEP) in Today's Engineering Education” by Dr. T. Murugavel, Professor & HOD-HSS Department & Innovation Ambassador, SVCE, on July 29, 2024.

Mentor-Mentee Mentoring Session:

- Mr. Abinandhan P and Mr. Velmurali B (IV Year) attended the Ministry of Education (MoE) Innovation Cell Sponsored Online Session on “Angel Investment/VC Funding Opportunities for Early-Stage Entrepreneurs” on July 22, 2024.

Guiding Framework Session:

- Mr. Kaleeswaran MR (IV Year) and Mr. Nataraj R (III Year) attended the MIC Live Session on “Guiding Framework for Creating and Engaging Trained Faculty and Student IIC Members” held at the Biotech Seminar Hall, SVCE, from 11:00 AM to 12:00 PM.

STUDENTS PARTICIPATION

- Mr. Aravind A, Mr. Unnikrishnan K, and Mr. Madhavan K, IV Year students, participated in a one-week industry-collaborated certificate course on **'Basic Pneumatic Systems, PLC & HMI Programming'**, organized by the Department of Electrical and Electronics Engineering at Sri Venkateswara College of Engineering (SVCE) in association with M/S Controlsoft Engineering India Private Limited, Chennai. The course took place from July 24, 2024, to July 29, 2024, and included two days of hands-on training at Controlsoft, focusing on IoT implementation and SCADA programming.
- Mr. Puneeth Vignesh S and Mr. Santheepkumar K S (II Year) participated in the two-day IoT training from July 22, 2024 to July 23, 2024, organized by the **Skill and Personality Development Programme Centre (SPDC)**. The sessions were held at the Library Second Floor, SUKALP Centre.

STUDENTS ACHIEVEMENTS

Placement

Placement Report (2020-2024 Batch):

- **Mr. Siva Sekar G, Mr. Thangaraj K and Mr. Praveen B** IV Year students received an offer as Project Trainees in M/s Husys Consulting Ltd with a salary package of 4.5 LPA.



Mr.Siva Sekar G



Mr.Praveen B



Mr.Thangaraj K



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 OFFERED

- **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.

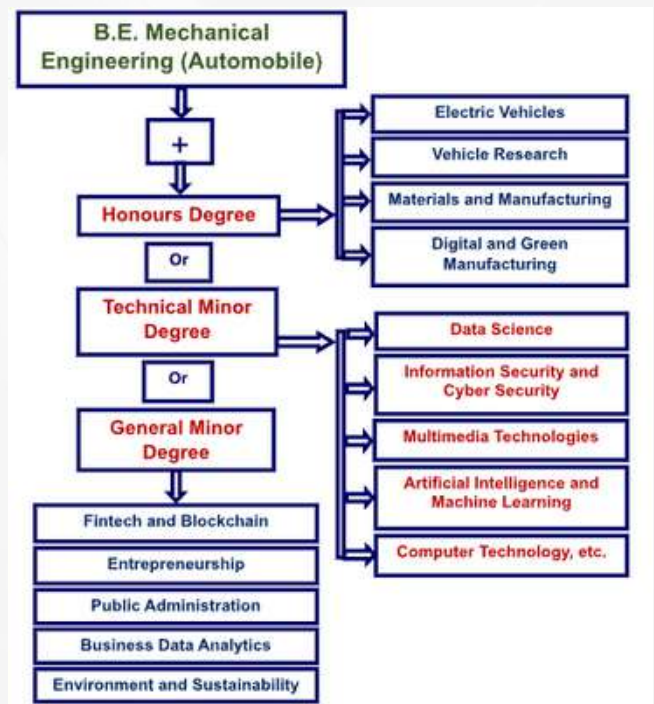
Placement

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.



Admissions for 2024-25 are now open!

APPLY NOW

