



# DEPARTMENT OF AUTOMOBILE ENGINEERING

## PROGRAMS

**B.E. AUTOMOBILE ENGINEERING**

**B.E. MECHANICAL ENGINEERING (AUTOMOBILE)**



# AutoXploR

**SEPTEMBER '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. 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.



# PROGRAMMES ORGANIZED

## Industrial Visit

II, III and IV Year Automobile Engineering students along with Dr. V. Ganesh, Associate Professor and Dr. K. Paul Durai, Assistant Professor visited the **5th Edition India EV International Show** in Chennai Trade Centre on 6th September 2024. The objectives of the visit to make the students to explore the latest manufacturing technologies, new EV trends, challenges and opportunities.



# PROGRAMMES ORGANIZED

## Industrial Visit

The Department of Automobile Engineering arranged an industry visit to the **Global Automotive Research Centre (GARC)**. III and IV year students, accompanied by Dr. G. Ravi, Assistant Professor visited the GRAC on 18th September 2024. The primary objective was to provide students with practical exposure to the testing and research facilities focused on IC engine and Electric vehicles.





# PROGRAMMES ORGANIZED

## ASSOCIATION ACTIVITIES

The inauguration of the **Association of Automobile Engineers (AAE)** and the **SAE Collegiate Club of SVCE** for the academic year 2024-25 was held on Wednesday, 11th September 2024, at the Bio-Tech Seminar Hall. The event featured an inspiring session by our **Chief Guest, Mr. Balaji K.N, Senior General Manager, Engineering R&D (Retired)** from Brakes India Limited. His valuable insights into the automotive industry were both enlightening and motivational for our students and faculty.

The poster is for the inauguration of the Association of Automobile Engineers (AAE) and the SAE Collegiate Club of SVCE. It features a portrait of Mr. Balaji K N, Senior General Manager, Engineering, R & D - Retired, Brakes India Limited. The event is scheduled for September 11, 2024, from 10:00 AM to 11:30 AM at the Bio Tech Seminar Hall, SVCE. The poster includes logos for SVCE, SAE Club of SVCE, and various accreditation bodies like AICTE, NAAC, and the Institution's Innovation Council. It also lists the department as the Department of Automobile Engineering.

**SVCE** Sri Venkateswara College of Engineering  
Autonomous Institution, Affiliated to Anna University, Chennai  
Approved by the AICTE, Accredited by NAAC

**SAE CLUB OF SVCE**

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

SOLICIT YOUR ESTEEMED PRESENCE FOR  
THE INAUGURATION OF

**ASSOCIATION OF AUTOMOBILE ENGINEERS (AAE)**  
&  
**SAE COLLEGIATE CLUB OF SVCE**

Inaugural Address  
by  
**Mr. Balaji K N**  
Senior General Manager  
Engineering, R & D - Retired  
Brakes India Limited

**ALL ARE CORDIALLY INVITED**

Scheduled on  
September 11, 2024  
10:00 AM to 11:30 AM

Venue  
Bio Tech Seminar Hall,  
SVCE

CONNECT @

# PROGRAMMES ORGANIZED

## ASSOCIATION ACTIVITIES



**Welcome Address by Mr. Yuvraj D,  
Executive member, AAE**



**Lightening of Kuthu Vizhaku by Chief  
Guest**



**Inagural Address by Chief Guest**



**Honoring the chief guest by the  
Department**



# FACULTY CONTRIBUTIONS

## World Maritime Day

The NCC cadets of SVCE celebrated **World Maritime Day** on 28th September 2024 under the guidance of Capt. Dr. A. Bhaskaran. The event was graced by the chief guest, Prof. S. Shanmugam, Professor & HoD of Marine Engineering, and coordinated by Dr. M. Sukumar, CTO - Army Wing, **Mr. R. Sakthivel, CTO - Naval Wing**, and Mr. J. Sivarampandian, CTO - Air Wing. A total of 20 Army Wing cadets, 10 Naval Wing cadets, and 20 Air Wing cadets participated. The celebration highlighted a heartfelt tribute to the naval forces, honoring their role in safeguarding the nation and facilitating global trade, a key contributor to India's GDP.



Welcome address by cadets



Mr. R. Sakthivel, CTO, delivering the chief guest introduction



Prof. S. Shanmugam, delivering an inspiring speech to the NCC cadets

# FACULTY CONTRIBUTIONS

## Teachers' Day Celebration

### SVCE

The faculty members from the Department of Automobile Engineering, SVCE secured the **Runner-up position** in the cricket match organized by the Student Council of SVCE as part of the **Teachers' Day celebrations** on 5th September 2024.



**Team Captain receiving the prize from the Principal**



**Group photo**

# FACULTY CONTRIBUTIONS

## Teachers' Day Celebration

### Delphi TVS Technologies

Dr. V. Ganesh, Associate Professor & A.HoD and Dr. K. Paul Durai, Assistant Professor, Department of Automobile Engineering, SVCE were honored for their contributions to students' career development during an event organized by Delphi TVS Technologies as part of the **Teachers' Day** celebrations on 18th September 2024.



Honoring Dr. V. Ganesh by Delphi TVS



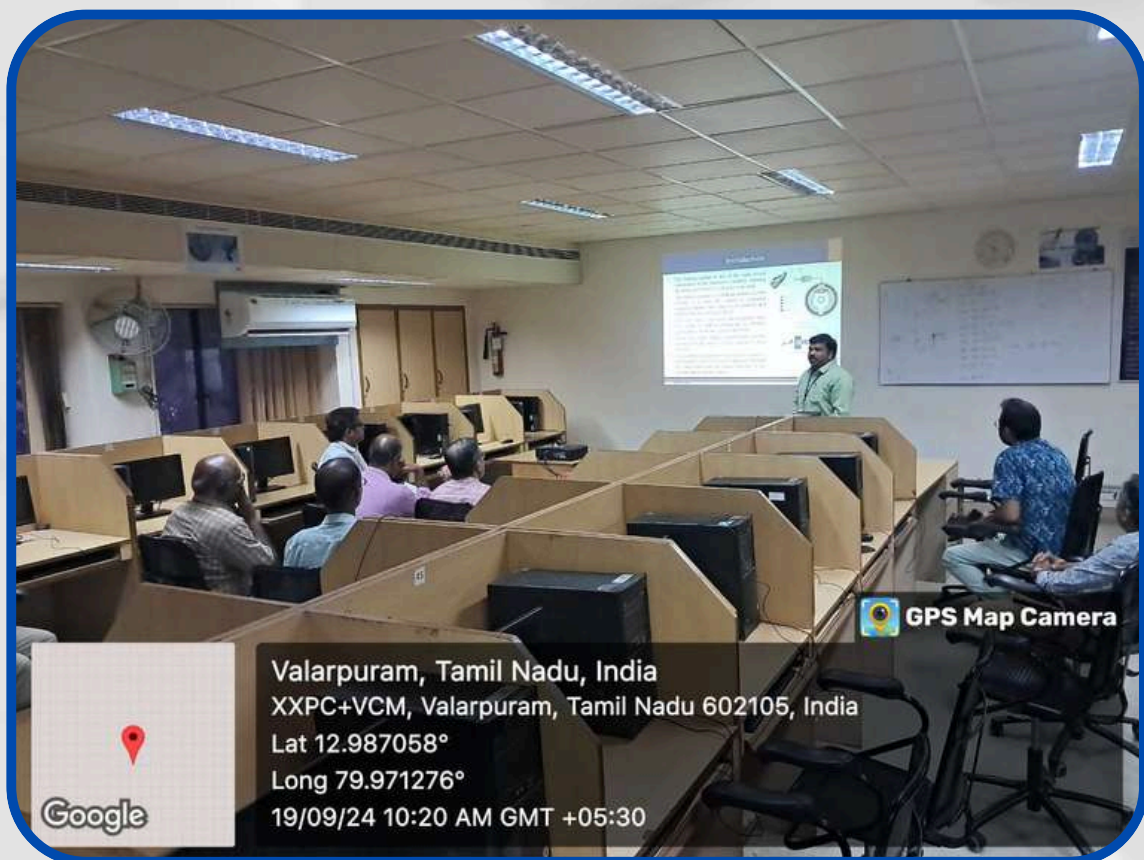
Honoring Dr. K. Paul Durai by Delphi TVS



# FACULTY CONTRIBUTIONS

## Ph.D Viva Voce

**Mr. Ramanjaneyulu Kolla, Assistant Professor** successfully defended his Ph.D thesis during the public viva voce on 19th September 2024 under the guidance of **Dr. Ganesh V, Associate Professor & A.HoD.**



**Presentation during Viva Voce**

# FACULTY CONTRIBUTIONS

## Semester in Industry Programme Meeting

**Dr. J. Venkatesan, Professor & HoD/AUT** and **Dr. S. Ramesh Babu, Professor & HoD/MEC** along with **Dr. V. Ganesh, Associate Professor & A.HoD**, **Mr. J. Dhanabal, Dr. K. Paul Durai** and **Mr. A.K. Boobalaseshthilraj, Assistant Professors /AUT** and **Dr. S. Suseel Jai Krishnan** and **Dr. G. Girish, Assistant Professors / MEC** have attended a meeting with **Mr. D. Vetrivelan, Deputy General Manager - Engineering, Sundaram Fasteners Limited** to collaborate on developing the course content for the Semester in Industry Programme on 28th September 2024.



**Discussion about Semester in Industry Programme**

# FACULTY CONTRIBUTIONS

## ATAL - Faculty Development Program

**Dr. K. Paul Durai and Dr. G. Ravi**, Assistant Professors, successfully participated and completed the AICTE Training And Learning (ATAL) Academy Faculty Development Program on “**Sustainability Through Green Mobility - Hydrogen from Renewables as a Viable Source of Energy**” organized by the Department of Mechanical Engineering, Sri Venkateswara College of Engineering from 09/09/2024 to 23/09/2024.



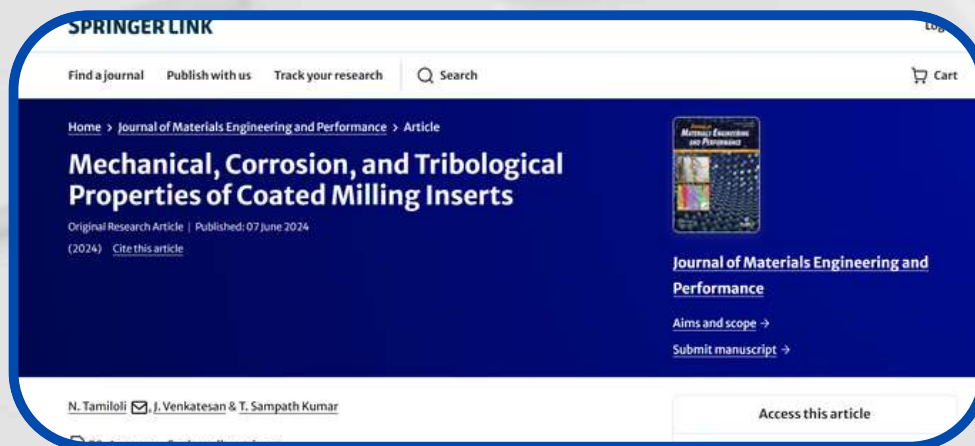
Group photo



# FACULTY CONTRIBUTIONS

## Publications

N. Tamiloli, **J. Venkatesan**, T. Sampath Kumar, "Mechanical Corrosion, and Tribological Properties of Coated Milling Inserts", Journal of Materials Engineering and Performance (ISSN: 1544-1024), June 2024. <https://doi.org/10.1007/s11665-024-09645-7>



# FACULTY CONTRIBUTIONS

**Mr. C. Gangadharan**, instructor, Automobile Engineering, has been assigned to overall coordinator for the **SEITON campaign and the 5S implementation process** at the college level. His efforts and presentation have been appreciated by Mr. M.G. Murali, 5S consultant, and the Dean - IQAC, SVCE for his excellence in showcasing the campaign's progress during the review meeting held on 26th September 2024 in the Bio Tech seminar hall.




**Presentation on 5S implementation by Mr. C. Gangandaharan**



**Review and Suggestions by Mr. M.G. Murali, 5S consultant**

# FACULTY CONTRIBUTIONS


**Mr. Gangadharan**, instructor, Automobile Engineering, has completed his Master of Business Administration Degree from Institute of Distance Education, University of Madras.

 **UNIVERSITY OF MADRAS**  
**INSTITUTE OF DISTANCE EDUCATION**  
**COURSE COMPLETION CERTIFICATE**  
**COURSE COMPLETED**

Serial No. 331 Date 07 OCT 2024

This is to certify that **GANGADHARAN C**  
with Enrolment Number **C22101PBR6424** has completed/discontinued  
**SECOND** Year of the course of study in **MASTER OF BUSINESS ADMINISTRATION**  
from **JAN 2022** to **DEC 2023** conducted by the  
Institute of Distance Education, University of Madras.  
His/Her date of birth as per the record is **09/12/1980**

This is issued in lieu of Transfer Certificate.

   
D.E. BUILDINGS  
CHENNAI - 600 005.  
RK24/ 0010959



# STUDENTS PARTICIPATION

**Mr. John Gill G**, III year Student was nominated for the IIC Student Innovation Ambassador program for the Department of Automobile Engineering for the Academic year 2024-25 and also he has completed the Innovation Ambassador Training "**Foundation level**" during IIC Calendar year 2024-25.



III and IV year Automobile Engineering students have attended the "**IIT PALS GATE/JAM Exam Orientation Session**" for the academic year 2024-25 held on 19th September 2024 in Multi Purpose Hall, SVCE.



# STUDENTS PARTICIPATION

## SAE Collegiate Club of SVCE

The Department of Automobile Engineering is proud to announce the participation of our students in the **SAEISS Student Convention 2024**, held on 21st September 2024 at Loyola ICAM College of Engineering and Technology, Chennai.

Our students actively participated in three events:

1. Computer-Aided Manufacturing (CAM),
2. Sheet Metal, and
3. Welding.



# STUDENTS PARTICIPATION

## SAE Collegiate Club of SVCE



### Computer Aided Manufacturing (CAM)

1. K. Unnikrishnan (IV-AUT)
2. V. Shivabaalaji (III-AUT)

### Sheet Metal

1. Priyesh (III-MEC)
2. C. Prathipa (III-AUT)
3. V. Guha Prasath (II-AUT)
4. M. Joshika (II-AUT)

### Welding

1. Ragul (III-AUT)
2. D. Dhanush (II-AUT)
3. G. Subramanian (II-AUT)
4. D. Yuvaraj (II-AUT)



# STUDENTS ACHIEVEMENTS

## STUDENT PROJECT SCHEME 2023-24 - TNSCST

Mr. Vaseekaran Anbuselvan A, Mr. Shyam Kumar S, and Mr. Senthilkumar S from the 2020-24 batch have been awarded a grant of ₹7,500 for their innovative project titled '**Intelligent Tire Pressure Regulation System**'. This grant, provided by the **Tamil Nadu State Council for Science and Technology (TNSCST)** under the Student Project Scheme 2023-24. Special appreciation goes to Dr. Ganesh V, Associate Professor & AHoD, for his invaluable support and mentorship.

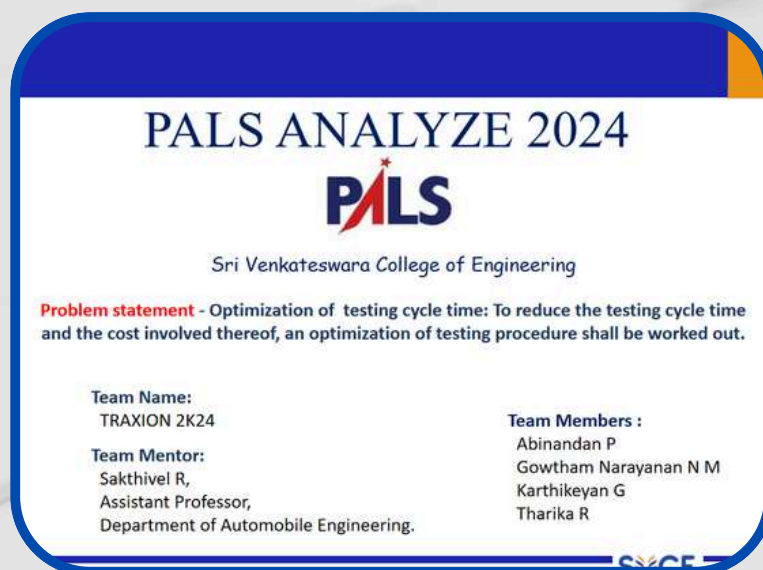


Project Model - Intelligent Tire Pressure Regulation System

# STUDENTS ACHIEVEMENTS

## PALS ANALYZE

Mr. Abinandan P, Mr. Karthikeyan G, Mr. Gowtham Narayanan N M and Ms. Tharika R, IV year students, secured 3rd Prize at the prestigious **PALS ANALYZE** event on September 4th, 2024. Organized by the **PAN IIT Alumni Leadership Series (PALS)**. Their presentation on '**Optimization of Testing Automotive Tyres to Meet Customer Requirements**' earned them this well-deserved recognition under the mentorship of **Mr. Sakthivel R**, Assistant Professor. His invaluable guidance throughout the project played a key role in their success.





# STUDENTS ACHIEVEMENTS

Automobile Engineering students excelled in the competitions organized by **K. Paul Durai, BIS Mentor, Standards Club** of Automobile Engineering, in collaboration with the **Bureau of Indian Standards (BIS)**:

## 1. Essay Writing Competition (18.03.2024) - Protective Helmet

- Mr. Johnin Gill G, III Year - 1st Prize,
- Mr. KAVI RAJ E, III Year - 2nd Prize,
- Mr. Arya BG, III Year - 3rd Prize and
- Mr. Gowtham PG, III Year - Consolation Prize

## 2. PowerPoint Presentation Competition (20.03.2024) - Topic: "Standards for New Automotive Components"

- Mr. Gowtham PG, III Year - 1st Prize,
- Mr. KAVI RAJ E, III Year - 2nd Prize,
- Mr. Arya BG, III Year - 3rd Prize and
- Mr. Johnin Gill G, III Year - Consolation Prize

The prize money, awarded by Bureau of Indian Standards (BIS), was distributed to the winners by Dr. J. Venkatesan, Professor & HoD and Dr. Ganesh V. Associate Professor & AHoD, Automobile Engineering.



During the Prize Distributions to the Winners



# STUDENTS ACHEIVEMENTS

## Extra Curricular Activites

The Department of Automobile Engineering congratulates the following students for their remarkable achievements in the **CM Trophy 2024** held on 19th & 21st September 2024 in Perarigner Anna District Sports Stadium Kanchipuram.

CM Tropy 2024					
S. No.	Name of the student	Year	Event	Position	Cash Prize (Rs)
1	Vishwa Tilakkumar E	III	Handball	Third	1000
2	Arya B G	III	Silambam	Second	2000
3	Puneeth Vignesh S	II	Table Tennis	Third	1000



# STUDENTS ACHEIVEMENTS

## Placement

Placement Report (2021-2025 Batch):

- **Mr. Yeshwanth K**, IV Year student received an offer as Business Development Associate in M/s Acmegrade with a salary package of 4 to 6 LPA and Rs. 18000 Stipend during internship.



# 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.

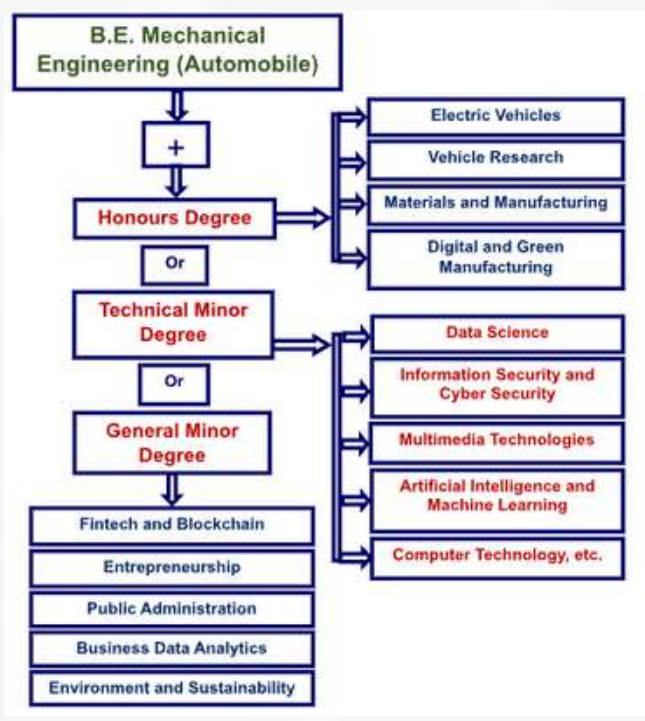
**Placement**

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**

