



Velammal Engineering College

SPARKZZZ-17

DEPARTMENT OF AUTOMOBILE ENGINEERING

VISION OF THE DEPARTMENT

To send forth into the world competitive graduates by providing knowledge through both theoretical learning and practical exposure to latest technologies in the field of Automobile engineering and inculcating in them a thirst for lifelong learning.

MISSION OF THE DEPARTMENT

- ◆ Maintaining state of art laboratory facilities to train the students with latest technology to cater to industrial needs
- ◆ To create awareness on the importance of research activities among the students
- ◆ To encourage creativity and innovation
- ◆ To produce young engineers with an ability to boldly face their future challenges
- ◆ To identify the top class R&D and academic institution in the field of automobile engineering and establish links with them for the mutual transfer of knowledge

PROGRAM EDUCATIONAL OBJECTIVES (PEOS):

- ◆ Graduates will have successful carrier in Automobile / Allied Industries and/ or Academics.
- ◆ Graduates will excel in Higher education / Entrepreneurship.
- ◆ Graduates will work as part of team / lead a team, use ethical attitudes in their profession and solve the engineering issues to broader social context through life-long learning.

PROGRAM SPECIFIC OUTCOMES

- ◆ Design and develop the automotive system and its components with due considerations of society impact and sustainability.
- ◆ Analyze the performance of automotive system using modeling, simulation and testing.

கற்றறிந்தார் கல்வி விளங்கும் கசடறச்
சொல்தெரிதல் வல்லார் அகத்து.

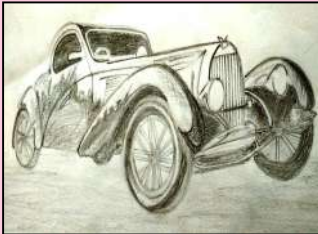
- திருவள்ளுவர்

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Car Name:

ROLLS ROYCE



PROGRAMME OUTCOMES

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** 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.
- 4. Conduct investigations of complex problems:** 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.
- 5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society:** 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.
- 7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication:** 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.
- 11. Project management and finance:** 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.
- 12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

பெண்களின் ஏழுவகை பருவங்கள்

உன் பெற்றோருக்கு பேதையடி நீ

உன் சுற்றத்தாருக்கு பொதும்பையடி நீ

பள்ளிப் பருவத்தில் மங்கையடி நீ

கல்லூரி பருவத்தில் மடந்தையடி நீ

திருமணப் பருவத்தில் அரிவையடி நீ

தாயாய் கருவைத் தாங்கும் தெரிவையடி நீ

குடும்பத்தை காக்கும் பேரிளம் பெண்ணடி நீ.....

- கோ. கார்த்திக்

மூன்றாம் ஆண்டு - தானியங்கி ஊர்தியியல் துறை

National Workshop on Virtual Hands on Training in Automobile Engine and Components – 2017



In the competitive world, molding the graduates with practical information will render them in the core knowledge. Hands on training will engrave sound understanding in the field of automobile engineering.

Hence National Level Workshop on Virtual Hands On Training in Automobile Engines and Components was organized on 19th September 2017, by our department to gain the practical knowledge in Automobile Engines and Its Components.

It is not a wonder to see more than 100 participants from various polytechnic and Engineering colleges to participate in this workshop. Having a very good blend of faculty and students made this workshop more interesting.

As co-ordinators Mr. P.Padmanaban, Mr. F.Aadil Arshad and Mr. S. Chermadurai would like to thank the management and all the faculty members for their support in the successful completion of the workshop.

“Education is the most powerful weapon which you can use to change the world”

- Nelson Rolihlahla Mandela

GUEST LECTURES

- ◆ The Guest Lecture on Automotive Transmission by Mr.Ramachandren, Sr. Manager, Daimler India Commercial Vehicle Pvt. Ltd, Chennai. (12-07-2017)
- ◆ The Guest Lecture on Automotive Fuels and Lubricants by Mr. Sudhavana S.Shetty Sr.Manager and Mr.B.Sathish Asst. Manager Gulf Oil Lubricants India Pvt. Ltd, Bangalore . (01-08- 2018)
- ◆ The Guest Lecture on Automotive Transmission and Core company placement strategies by Mr.Aswin Kugan, Fiat Chrysler Automiles, Power train Validation Engineer, Chennai. (20-12-2017)
- ◆ The Guest Lecture on IC Engine testing and emission control Technology by Mr.Arunraj, Manager R&D, PSA AVTEC Power Train Pvt. Ltd, Hosur. (29-12-2017)

IN-PLANT TRAINING

- ◆ Maruthi Service Masters (27/05/2017 to 03/06/2017).
- ◆ Combat Vehicles Research & Development Establishment (05/06/2017 to 09/06/2017).
- ◆ Chennai Port Trust (13/06/2017 to 17/06/2017).
- ◆ Ojala (India) Engineering Private Limited (12/06/2017 to 16/06/2017).
- ◆ T V Sundram Iyengar & Sons Private Limited (27/10/2017 to 02/11/2017).
- ◆ ELTA Tools & Dies (17/11/2017).
- ◆ Tamilnadu State Transport corporation (04/12/2017 to 08/12/2017).

INDUSTRIAL VISIT

- ◆ Brakes India Pvt. Ltd. Padi, Chennai - 50. (12-08-2017)
- ◆ Integral Coach Factory (ICF), Chennai - 38. (22-08-2017)
- ◆ Caparo Engineering India Pvt, Ltd., Sunguvarchatram, Kanchipuram - 602106. (29-08-2017)
- ◆ Nutech CNC Private Limited, Vanagaram, Chennai -58. (14-09-2017)



INTERNSHIP TRAINING

- ◆ Hindustan Coca-Cola Beverages Private Limited. (17-04-2017 to 30-04-2017)
- ◆ Tata Motors, KLN Motor Agencies (29/11/2017 to 13/12/2017)

STUDENTS ACTIVITIES & ACHIEVEMENTS

- ◆ NPTEL Online Certification Course (Programming in C++) by IIT Kharagpur (July to September 2017)
- ◆ Participate in Assembling & Dismantling event at Sriram Engineering College (21/09/2017)
- ◆ Participate in Pitstop event at Sriram Engineering College (21/09/2017)
- ◆ Won IInd prize in Cad modeling event at Sriram Engineering College (21/09/2017)
- ◆ Participate in Autoquiz event at Sriram Engineering College (21/09/2017)
- ◆ Participate in Heteora event at Bannari Amman Institute of Technology (07/09/2017 to 09/09/2017)
- ◆ Participate in Robo Exotica event at Bannari Amman Institute of Technology (07/09/2017 to 09/09/2017)
- ◆ Participate in Robo race event at Bannari Amman Institute of Technology (07/09/2017 to 09/09/2017)
- ◆ Participate in IC Burnout event at Saveetha Engineering College (26-09-2017 to 27-09-2017)
- ◆ Participate in RC Nitro Race event at Government College of Engineering, Bargur (26-09-2017 to 27-09-2017)
- ◆ Won IInd Prize in Tier II Level Work Holding event at (SAE INDIA) TJS Engineering college (2017-18)
- ◆ Won IInd Prize in Tier II Level Mechanical Engineering event at (SAE INDIA) TJS Engineering college (2017-18)
- ◆ Won IIIrd Prize in Tier II Level Diagrammatic Reasoning event at (SAE INDIA) TJS Engineering college (2017-18)
- ◆ Participate in Autoquiz event at (SAE INDIA) TJS Engineering college (2017-18)
- ◆ Won IInd Prize in Mini Turbo event at MIT, Chennai (05-01-2018 to 06-1-2018)
- ◆ Won IIIrd Prize in Fire and Ice at IIT Madras (2017-18)
- ◆ Won IIIrd Prize in Reverse Engineering event at TJS Engineering college (23-12-2017)
- ◆ Won Ist Prize in Material identification event at TJS Engineering college (23-12-2017)

PAPER PRESENTATION

- ◆ Presented a paper in DRACARYS 2K17 at Sriram Engineering College
- ◆ Presented a paper in national Symposium 2K17 at Madha Engineering College



**Mini Turbo
Fire and Ice
Material identification
Devil Riders
RC Car Race
SAE INDIA
Sports
Paper Presentation
National YOGA
Tier II Level Events**



SPORTS

- ◆ Won 1st prize in Yogasana Championship conducted by Tamilnadu Yoga Association, Yoga Nagar, Madurai. (25/08/2017 to 26/08/2017)
- ◆ Participated in Ball Badminton at Prathyusha Engineering College. (10/08/2017 to 11/08/2017)
- ◆ Won 1st prize state Yoga competition at Adhiyamaan College of Engineering (22/07/2017 to 23/07/2017)
- ◆ Won 3rd prize in Dr.Porchezhian Memorial Inter Collegiate Hockey Tournament at Madras veterinary College. (12/07/2017 to 14/07/2017)
- ◆ Participated in Parthasarathy memorial Basketball Tournament at Chennai Institute of Technology. (10/01/2018 to 11/01/2018)
- ◆ Won 2nd prize in Weight lifting Championship at Don Bosco Higher Sec School. (12/11/2017)

NSS

- ◆ NSS volunteers - Anna University. (19/08/2017)
- ◆ Independence Day. (15/08/2017)
- ◆ Cultural Day. (09/08/2017 to 11/08/2017)
- ◆ Blood Donation Camp. (29/06/2017)

YRC

- ◆ World Yoga Day Event. (21/06/2017)
- ◆ Blood Donation Camp. (29/06/2017)

E-CELL

- ◆ Hidden Dreams Program Organized in Velammal Engineering College. (24/07/2017)
- ◆ Visionaries at Ethiraj Women's College. (2017-2018)

PROFESSIONAL BODIES MEMBERSHIP

- ◆ SAE
- ◆ ISTE
- ◆ IEI



FACULTY AS RESOURCE PERSONS

- ◆ Faculty Development Training Program on Theory and performance evaluation of automotive vehicle subsystem using modern tools and equipments at Sri Venkateswara college of engineering, Chennai. (17/11/17)
- ◆ Seminar on Research Promotion Strategy at Velammal Engineering College, Chennai. (20/10/17)

FACULTY PUBLICATION

- ◆ Effect Of Different Proportions Of Silicon Carbide Reinforced Magnesium Alloy Composites For Connecting Rod Appellations - Journal of Manufacturing Engineering. (June 2017)
- ◆ Effect of Different Proportions of Magnesium reinforced Carbon Steel for Excavator Bucket Teeth - Journal of Automation and Automobile Engineering. (December 2017)

INTERNATIONAL CONFERENCE

- ◆ Evaluation of Excavator Bucket Teeth using EN216 Carbon Steel at AMET University. (11.8.2017)

NATIONAL CONFERENCE

- ◆ Analysis of surface finish and tool wear in machining process of GFRP (Glass fiber reinforced plastic) material at PSG College of Technology. (12-12-2017 to 13-12-2017)
- ◆ Study on Inedible seed shells pyrolysis kinetics and pyrolysis oil fuel properties at NIT Rourkela. (August 2017)
- ◆ Performance, emission and combustion characteristics of dimethyl carbonate substituted gasoline blends in an MPFI spark ignited engine at NIT Rourkela. (August 2017)

FACULTY PARTICIPATION

- ◆ Workshop on Advances in cryogenics and cryo-materials at Veltech Dr.RR & Dr.SR University, Chennai. (10/11/2017 to 11/11/2017)
- ◆ FDP on Internal combustion engines at Indian institute of science, Bangaluru. (27/11/2017 to 1/12/2017)
- ◆ Workshop on Concept Development for inspiring innovations to bind science and society at AMET University, Chennai. (5/10/2017)
- ◆ Work shop on Fabrication, Characterization and Analysis of Composite Materials at SA Engineering College, Chennai. (30.1.2018 to 31.1.2018)
- ◆ FDP on Research perspectives in IC Engine at SRM Institute of Science and technology, Chennai. (06/12/2017)
- ◆ Workshop on Research Promotion Strategies at Velammal Engineering College, Chennai. (20-10-2017)
- ◆ FDP on Application of CFD in science and engineering at R.M.K College of engineering and technology, Chennai. (01/12/2017 to 2/12/2017)
- ◆ FDP on Entrepreneurship Development Program WF-101 at CEG Anna University, Chennai. (28/11/2017 to 30/11/2017)
- ◆ FDP on Theory and performance evaluation of automotive vehicle subsystem using modern tools and equipments at Sri Venkateswara college of engineering, Chennai. (06/11/2017 to 21/11/2017)
- ◆ FDP on Two and Three Wheelers at Sri Venkateswara college of engineering, Chennai. (27-11-2017 to 05-11-2017)
- ◆ FDP on Engineering Mechanics at University college of Engineering – Kanchipuram Campus. (18-12-2017 to 24-12-2017)





VITAE - 2017

**National Level
Technical
Symposium
(XLR8)**



STAFF COORDINATOR
Mr. M. SENTHAMIL SELVAN

STUDENT COORDINATORS
Mr. PRADHAN N (IV Year)
Mr. THARUN B (IV Year)

