Er. PERUMAL MANIMEKALAI COLLEGE OF ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

An International Conference on "Recent Trends in Science, Engineering and Management"

Annual Newsletter

Date: 27.04.2023 & 28.04.2023

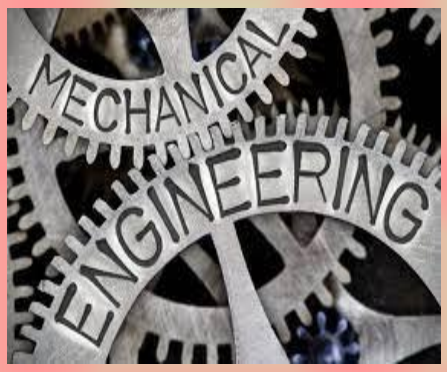
In Association with

SAEINDIA SOUTHERN SECTION

ISHRAE

INDIAN SOCIETY FOR TECHNICAL EDUCATION ISTE

THE INSTITUTION OF ENGINEERS (INDIA) INCORPORATED BY ROYAL CHARTER 1935



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INSTITUTION AT A GLANCE:

"PMC TECH – Group of Institutions is uniquely positioned to provide the Vision, Leadership and Intellectual Capital that underwrite progress in the 21st Century"

Established in the year 1996 under the dynamic leadership of Er. P. Perumal, Founder & Chairman and bannered by "Er. Perumal Manimekalai Telugu Minority Educational and Charitable Trust", the Institutions is a sunrise hub for providing quality education in the region. PMC TECH has been envisioned to be an Educational Institutions promoting academic and professional excellence, nurturing and sustaining conducive ambiance for sculpting budding talents into technology and management leaders of tomorrow and inculcating in them professional ethics, cultural values, sensitivity and sense of service towards society.

PMC TECH ENGINEERING COLLEGE AT A GLANCE:

Er. Perumal Manimekalai College of Engineering (established 2002), approved by AICTE and affiliated to Anna University, offers the students an advantageous atmosphere with state-of-art facilities, distinguished mentors and pleasant educational environment to provide Quality Education. Our Institution has accredited by NAAC with 'A' Grade and attained recognition of ISO 9001:2015 certification for Quality Systems. Located in Nallaganakothapalli, Near Koneripalli, Hosur, KrishnagiriDistrict, vicinity to Bengaluru.

ABOUT THE DEPARTMENT:

Since its inception in the year 2002, the Department with its energetic and dynamic faculty has provided complete dedication to convert young individuals into engineers, with both classroom and shop floor knowledge. Here we pursue the mechanical engineering of the future. Students learn the fundamentals of mechanical engineering by focusing on core disciplines in mechanics, manufacturing, and systems, together with essential areas of mathematics and physical sciences.

We provide outstanding coursework, projects, and activities in which fundamental course knowledge will synthesized and applied in a holistic fashion with wide-ranging design projects. We offer outstanding technical enhancement opportunities, with a strong culture of collaboration that enables our students and faculty to tackle the world's most important and difficult technical challenges.

FOUNDER CHAIRMAN'S MESSAGE:

"Any place that anyone can learn something useful from someone with experience is an Educational Institution."

Er. P. Perumal
Founder & Chairman

True Education indeed paves the path for the children to learn new things in a correct manner. It heals them, broadens their perspectives and enriches their knowledge to face the globally competitive era. PMC TECH started in 2002 with an objective to provide quality education and excellence in ever changing field of technical education. Technology is moving at a very fast pace. What was breakthrough yesterday is obsolete today.

This has made it imperative that future technocrats must be familiar not only with technical skill but also with the technology of tomorrow. The maximum "survival of fittest" is more relevant now than ever before. We believe in value-based quality education and faculty Members at PMC TECH are striving hard for it, so that product of PMC TECH is well received by the industry, public and private sector organization and others. I hope young engineers passing from the institute will create difference in Indian and Global scenario.

CHAIRMAN'S MESSAGE:

"The object of education is to prepare the young to educate themselves throughout their lives"."

Shri. P. Kumar
Chairman

Time has now come to realize your dream to be in the main stream of your professional career and must be a great feeling to be a part of most prestigious one. PMC TECH has a history of more than 14 years. In recent years degree in the technical education like Engineering, has become the foremost academic qualification for all leading Industries, Government and Non-Government sectors. Academicians and Industrialists alike have recognized the value of he degree in the developing challenges of the rapidly changing technical environment. One of the strength of our campus is the diversity of programs and members background and experience. The range of functional, professional and vocational skills and knowledge that participants bring to the program allow the lecturing faculty to test the validity of theoretical concept against of rich background of personal and organizational outlooks. The Campus environment and work culture will encourage individuals from all walks of life and from all special and economic backgrounds. To be Engineers and other technical – based professionals, can all benefit from the experience at this beautiful campus.

SECRETARY'S MESSAGE:

"Education is a progressive discovery of our own ignorance."

Smt. P. Mallar
Secretary

At PMC TECH, we value every individual and it is our aim to providethe best possible environment where students can succeed. Our campus hasgrown from its inception in 2002 to accommodate almost 3000 pupils in first- class teaching facilities which are amidst beautifully kept grounds. We are fortunate to have a talented, highly committed teaching and supporting staffhere to ensure the learning environment of our students is the best it can be.

We seek to prepare our young men and women with the very best preparation for life after PMC TECH. Our departing Collegians should be well rounded individuals who are grounded in the Anglican way of faith, hope and love. We seek to instill in our students a passion for learning which brings knowledge and makes them to understand that they need to make a positive contribution to the community where they live and work. The likelihood of achieving this is strengthened by the fact that we offer an academic program that includes indepth, rigorous coaching and which can be tailored to individual needs. We encourage high academic standards and have high expectations of personal discipline and motivation from our students.

TRUSTEE'S MESSAGE:

"If you are planning for a year, sow rice; if you are planning for a decade,plant trees; if you are planning for a lifetime, educate people."

Smt. S. Sasirekha
Trustee

PMC TECH is committed to creating an ambience for nurturing innovation, creativity and excellence in our students. We aim to prepare the young engineers and managers to face confidently and competently the challenges and competition by imparting high quality technical and managerial education coupled with appropriate training and wide exposure tothe state–of–art practices. We give top priority to discipline and knowledge and the application of the same for societal progress and upliftment. Dear Students, your future begins here. We look forward to helping you succeed!

PRINCIPAL'S MESSAGE:

"Education is what remains after one has forgotten what one has learned in school."

Dr. S. Chitra
Principal

To educate a student in mind and in morals is the most significant need of the hour, we at PMC TECH provide quality education adhered to discipline that composes every student to realize the self and inspires them to build their career with greater ease in this ever changing competent society. PMC TECH has a long list of achievements in providing quality education while meeting the basic criteria of affordability, accessibility and equality. We are providing a perfect platform for students to think, express and exhibit their talents. So for every aspiring student PMC would be the perfect place to shape their flourishing future.

Apart from the academic curriculum, the students are encouraged to excel in the skills they have like in sports, cultural, Music etc. They get first-hand experience in organizing the mega events the college conducts. We emphasize on the students knowing the subjects apart from the prescribed syllabus and the staffs prepare themselves for that adequately. The students interested to put in hard efforts are protected from any external disturbances and are helped in the process. Nowadays, the parents too are co-operating with us to bring a dynamic change in their wards personality and we expect every parent to help us to help them. A thorough congenial atmosphere to grow as a academic-savvy is provided for the students to utilize for their and parents benefit. Once the students step in, they leave out in prime self-confidence to excel in any endeavors they may face. We prepare them for that.

HOD'S MESSAGE:

"Democracy cannot succeed unless those who express their choice are prepared to choose wisely. The real safeguard of democracy, therefore, is education."

Placement of young energetic budding engineers is of prime importance to all of us. A systematic development in soft skills and overall confidence building through weekly programs is unique of our institute. Ultimately, our student will be a holistic person. Thanks to the educationally committed management; we have the reputation that we provide all the facilities and amenities. May be because of all these, I proudly say that 44 of our students were placed in the reputed companies in this year 2022-2023. I am thankful to all my colleagues who are striving hard to establish Mechanical Department as one of the leading Department in PMC Tech.

VISION OF THE INSTITUTION:

PMC TECH strives to achieve excellence in technical Education through innovative teaching,learning and applied Multidisciplinary research with professional and ethical practices.

MISSION OF THE INSTITUTION:

PMC TECH will Endeavour

- To become the state of art teaching and learning center for Engineering and Technology,Research and Management Studies.
- To have world class infrastructure for providing quality education and research towardscreativity, self-discipline and ethical values.
- To associate with industry, R&D and business organizations and to have connectivity with thesociety.
- To create knowledge, based professionals to enrich their quality of life by empowering self andfamily.

QUALITY POLICY

PMC TECH is committed to create quality professionals to meet the emerging industrial and socialneeds through

- Innovative Teaching
- Institution-Industry Interaction
- Placing faith in human values
- Meeting regulatory requirements & aims continual improvement in all activities.

PROGRAMMES OFFERED:

UG PROGRAMMES B.E. / B.TECH:

- Aeronautical Engineering
- Artificial Intelligence and Data Science
- Civil Engineering
- Computer Science and Engineering
- Computer Science and Business Systems
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Electronics & Instrumentation Engineering
- Mechanical Engineering
- Mechatronics Engineering
- Information Technology

PG PROGRAMMES M.E./MBA /MCA:

- Aeronautical Engineering
- Applied Electronics
- Computer Science and Engineering
- Engineering Design
- Power Electronics and Drives
- MBA – Master of Business Administration
- MCA – Master of Computer Applications

RESEARCH PROGRAMME:

- Ph.D. –Computer Science and Engineering
- Ph.D. – Management Studies

VISION OF THE DEPARTMENT:

Achieve excellence in Mechanical Engineering by imparting knowledge, quality practices and inculcating ethics and human values to cater the ever-changing industrial demands and societal needs.

MISSION OF THE DEPARTMENT:

- To provide knowledge and skills in mechanical engineering through effective teaching –learning methods, quality infrastructure and resources.
- To provide platform by fostering for creativity, innovation and multi-disciplinary approach tosolve industry and societal problems.
- To habituate the students to focus on leadership, ethical values and lifelong learning for selfand societal development.

PROGRAM EDUCATIONAL OBJECTIVES OF MECHANICAL ENGINEERING (PEO's):

The Graduates of PMC Tech's Mechanical Engineering Program shall

PEO1: Have the ability to apply knowledge across the disciplines and in emerging areas of MechanicalEngineering for higher studies, research, and employability.

PEO 2: Have good communication skills, soft skills, managerial skills, leadership qualities, ethical values, sense of responsibility to serve the society and protect the environment.

PEO 3: Become entrepreneur / innovators to design and develop manufacturing systems and services to address social, technical and business challenges with lifelong learning for a successful professionalcareer.

PROGRAM OUTCOMES OF MECHANICAL ENGINEERING (PO's):

The students of B.E., Mechanical Engineering program shall have the following knowledge, skills and behavior:

PO1 - Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. **PO2 - Problem analysis**: Identify, formulate, review research literature, and analyze complexengineering problems reaching substantiated conclusions using first principles of mathematics, naturalsciences, and engineering sciences.

PO3 - 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.

PO4 - Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of theinformation to provide valid conclusions.

PO5 - 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 anunderstanding of the limitations.

PO6 - 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 theprofessional engineering practice.

PO7 - Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need forsustainable development.

PO8 - Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice.

PO9 - Individual and teamwork: Function effectively as an individual, and as a member or leader indiverse teams, and in multidisciplinary settings.

PO10 - 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 clearinstructions.

PO11 - 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 leaderin a team, to manage projects and in multidisciplinary environments.

PO12 - 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.

PROGRAM SPECIFIC OUTCOMES OF MECHANICAL ENGINEERING (PSO's):

PSO-I: Apply principles of machine design, manufacturing, thermal engineering and management toidentify, formulate and solve real life problems.

PSO-II: Use modern tools for modeling, simulation and computational techniques relevant to mechanical and allied engineering.

PSO-III: Develop viable solutions for mechanical engineering problems/processes for industrial andsocietal needs.

MEMORANDUM OF UNDERSTANDING (MoU's):

PMC TECH entered into MoU's with certain prominent Industries, Associations, Service sectorsetc., for sharing knowledge, promoting interaction, conceptualize research and facilitate implementation on mutually beneficial areas of upcoming engineering, technological and management concepts. Below is the list of our mutually beneficial MOU's.

Metco Roof Private Limited
Bengaluru

FANUC India Limited
Bengaluru

Harita Seating System Limited, Hosur

PROFESSIONAL BODIES:

Intended to enhance the quality of education, make academic offerings in par with the Industry needs, structure the programs incorporating professional requirements and thereby develop better collaboration until attaining mutualism with Industries, PMCTECH build lasting partnerships with certain Professional Bodies also. Below is the list of few of our Professional bodies.

Society of Automotive EngineersHosur Sub-Chapter

Quality Circle Forum of India
Hosur Sub-Chapter

Indian Society of Technical Education

The Institution of Engineers

Indian Society of Heating, Refrigerating and Air Conditioning Engineers - Hosur Sub-Chapter

INDUSTRY/ACADEMIC INSTITUTIONS COLLABORATIONS:

As technology connects the world and provides unprecedented access to knowledge, progressive institutions are seeking strategies to leverage the vast potential of learning to make higher education more accessible and affordable. PMC Tech build lasting partnerships with many of our nation is best learning centers as a commitment to excellence in higher education.

CISCO Academy

Infosys Campus Connect

Oracle

Wipro Technologies - Mission10x Technology Learning Centre

NPTEL - Digital Resources

IIT - Bombay & IIT - Kharagpur

Below list offew of our academic partners:

Visionary Learning Community of India

FANUC India Pvt Ltd.

AXIS Global Automation

VALUE ADDED CENTRES:

Innovation & Entrepreneurship Development Centre -(IEDC)

Infosys Campus Connect – Learning Centre

Aakash Project Centre – IIT – Bombay

Micro, Small & Medium Enterprises

INNOVATION & ENTREPRENEURSHIP DEVELOPMENT CENTRE-(IEDC):

Innovation &Entrepreneurship Development Centre (IEDC), set up in 2014, is sponsored by National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology with a view to promoting self - employment in the country & linking S&T manpower with institutional credit facilities. One of the major objectives of the board is to promote &develop entrepreneurship with Science & Technology to cater the needs of the country in Entrepreneurship. With the same objectives IEDC, PMC TECH is striving to create more Entrepreneurs to realize the Our Prime Ministers dream "Make in India".

This value added chapter adds an additional value of our department students and helps the students by funding their innovation ideas in order of projects and make

Themes Entrepreneurs. In addition to this, it helps the students to complete and develop moreprojects by funding their project ideas and innovative thoughts.

The rationale IEDC of PMC TECH is to:

Provide training to potential learners to become job creators rather than job seekers

Provide a cost-effective mode of training in entrepreneurship to those living in remote areas and thusdeprived of participating in conventional EDPs

Provide the facility of learning in one's own environment, at own pace and convenience;

Make sizeable contribution quantitatively and qualitatively to the task of strengtheningentrepreneurship in the country.

FANUC CENTRE FOR CNC & ROBOTICS TRAINING:

Centre for Advanced CNC and Robotics was setup in association with Fanuc India Limited and the centre is approved by FANUC as an authorised training centre. The centre is equiped with CNC machines with Fanuc controllers, Fanuc NC guide and Roboguide simulators and Fanuc robots. PSG has been imparting training on CNC programming, operations & maintenance on Fanuc CNC controllers since 1999.

About the Course

Development of CNC is an outstanding contribution to the manufacturing industries. With the help of CNC technology, it has been possible to integrate production equipment into a totally computer-controlled environment. So it becomes essential to update the knowledge of practicing engineers in the areas of diagnostics, troubleshooting and maintenance of CNC machines. The course content if framed to provide an in-depth knowledge on the present state-of-art technology.

Objective of the Course

- To induce knowledge on the basics of CNC technology and their latest developments.
- To develop all participants capable of independently program, operate, maintain and trouble shootCNC machines.

Facilities Available

- CNC Lathe with Fanuc Controller
- Galaxy CNC Lathes with Fanuc Controller
- MG CNC Turning Centres with Fanuc Controller
- CNC Milling with Fanuc Controller
- Fanuc NC Guide Software

Courses Offered

- CNC Programming Turning
- CNC Programming Milling

YASKAWA CENTRE FOR ROBOTIC WELDING & AUTOMATION

PMC TECH offers Industrial Automation & Industrial Robotics, specially designed for engineering students. It focuses on applying precise mathematical applications to create and program Electronic, Mechanical and Pneumatic Systems. The aggressive industrial training program includes comprehensive practical and practice training sessions based on live projects.

PMC TECH - Yaskawa Offers Certification Programs:

- ✓ Industrial Control & Automation Training
- ✓ Industrial Process Automation Laboratory
- ✓ Industrial Robotics Training

- ❖ PG - Diploma in Factory Automation
- ❖ PG - Diploma in Industrial Robotics Training
- ❖ Mater Diploma Training Programs
- ❖ P. G Diploma in Automation & Robotics Training

VISIONARY LEARNING COMMUNITY OF INDIA (VLCI):

Visionary Learning Community of India (VLCI) Program initiated on 21st August 2018.As part of **"Creating Visionary Leaders For Manufacturing"**, ajoint Initiative of **Japan International Cooperation Agency (JICA) and Confederation on Indian Industry (CII)** with the support of **Harita Seating Systems Limited**, Tractors And Farm Equipment Ltd (TAFE) and Harita Fehrer Ltd organized by **Department of Mechanical Engineering** from 21st August 2018 to 1st October 2018.

SUPPORTING INDUSTRIES

Harita Seating Systems Ltd.

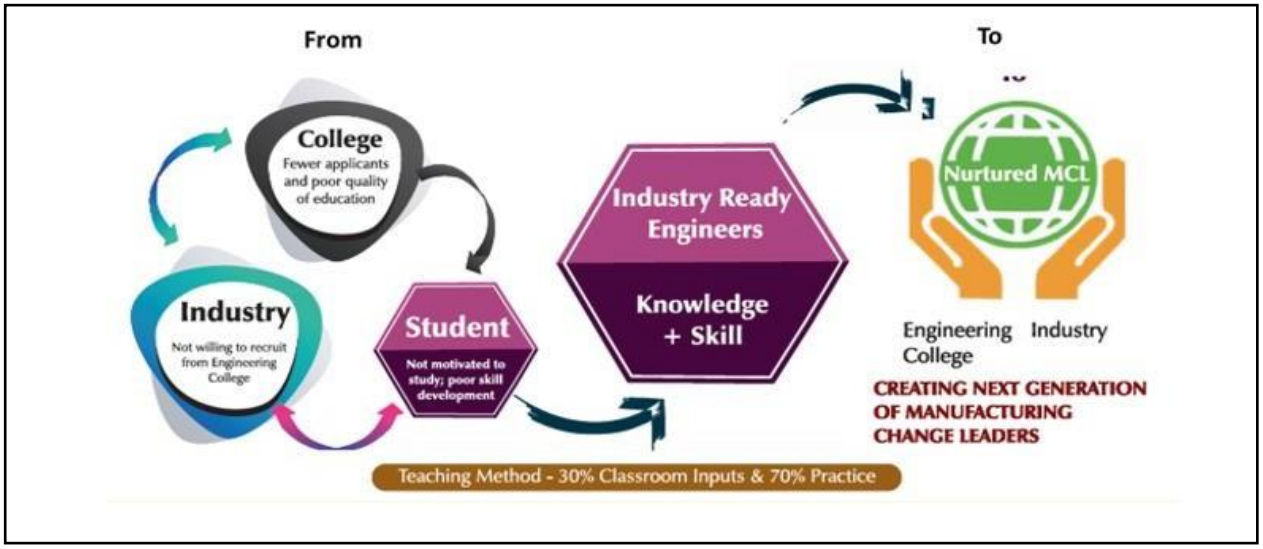
TAFE

Harita Fehrer

JICA
Japan International Cooperation Agency

VLFM
Visionary Leaders For Manufacturing

CII
Confederation of Indian Industry



Visionary Learning Community of India

What is VLCI? :

India is the fastest growing economy in the world with the benefit of a growing young population looking to get integrated into India's working population. However, there are following challenges interms of industrial development especially in smaller towns.

- 1.5 Million Engineers in India are passing out every year run the risk of not getting a job at all,points out Economic time.
- The industries deals with shortage of good engineers.
- The local academia (engineering colleges/universities) trapped in traditional curriculum andclassrooms.
- Low quality engineering students face a campus placement crisis.
- In order to solve those challenges and create Manufacturing Change Leaders (MCL) with skillto contribute to the Indian industry, Visionary Learning Community of India (VLCI) has launched in 2015. The VLCI is applying the accumulated experiences of Visionary SME (VSME) Program implemented by Prof. Shoji Shiba, Mr. Takeyuki Furuhashi and Confederation of Indian Industry (CII).
- VLCI boost your curriculum as a vital supplement its result to student employability.

VLCI Curriculum:

VLCI Model Curriculum for College

Suitable Branches : Mechanical, Production & Automobile Engineering

Sr. No.	Module	8 Semester-4 Years Course								Student's Participation
		Sem 1	Sem 2	Sem 3	Sem 4	Sem 5	Sem 6	Sem 7	Sem 8	
1	Observation SkillsSafety & Cleanliness (Part-1 – Public Places & Part-2 – Factory)									Full Class
2	Evolution of Modern Manufacturing									Full Class
3	Modern Manufacturing Basic Knowledge & Skills									Elective
4	Introduction to FMS (Flow Management System)									Elective
5	Flow Management Concepts									Elective + Winter (Nov-Dec Internship -4 weeks)
6	Leadership Skills for Manufacturing									Elective

Teaching Method - 30% Classroom Inputs & 70% Practice

VLCI Company Visit:

To develop student's ability on the industrial experience on 13th march 2019 students from mechanical engineering department visited Haritha seating systems Ltd. Students enhanced their knowledge by interacting with the people in the industry as a part of this VLCI program.

SAE CHAPTER:

SAEINDIA is committed to advancing the engineering profession through its many student programs and activities in coordination with SAE International. Our Institute organized different activities under this chapter.

ISHRAE CHAPTER:

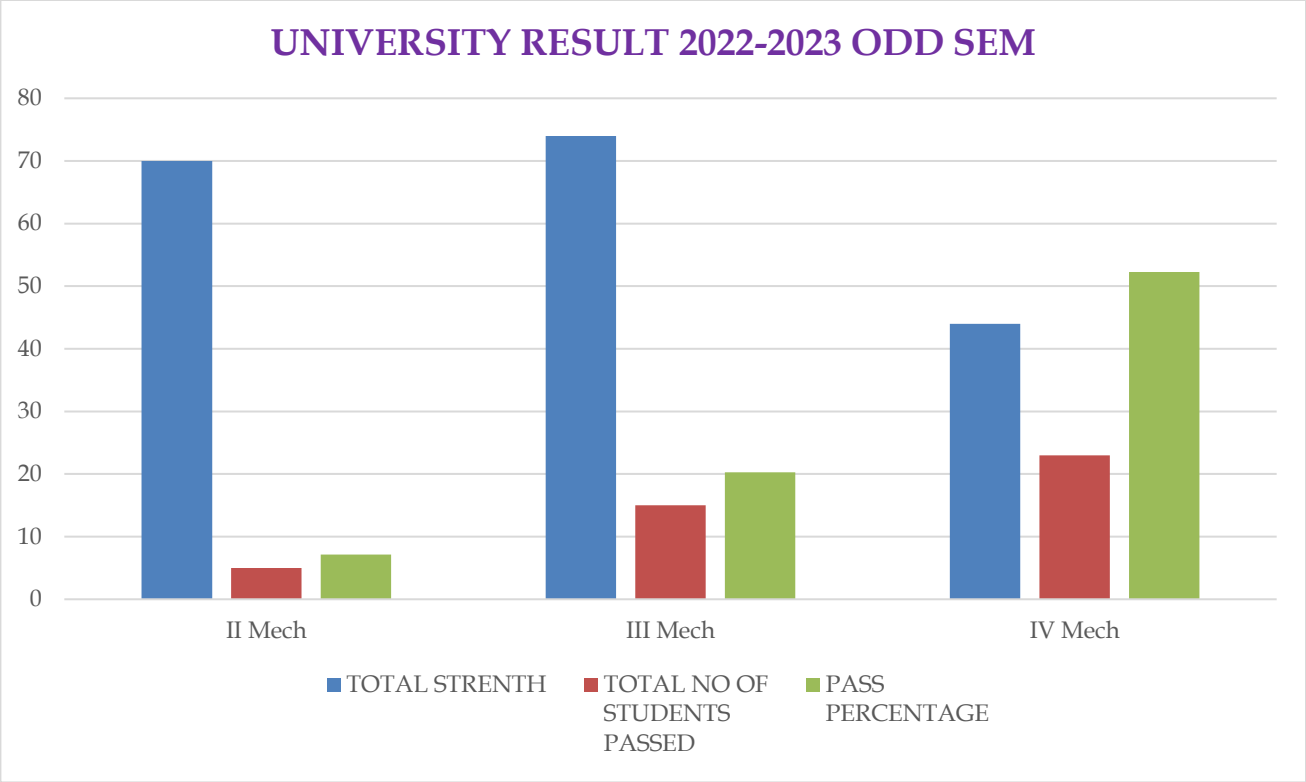
ISHRAE mission is to promote the society for the benefits of the public. Towards this objective, the chapter was started in college on 21st sept 2019 for the students to participate and organize, activities to protect the environment, improve indoor air quality, help Energy conservation, provide continuing education to the members and provide career guidance to students at the institution.

STUDENT STRENGTH & ACADEMIC EXCELLENCE:

B.E – Mechanical Engineering			M.E - Engineering Design	
II Year	III Year	IV Year	I Year	II Year
70	74	44	3	10

UNIVERSITY EXAMINATION RESULT FOR 2022 - 23 ODD SEMESTER

S. No.	Year	Total Number of Students	All Clear Students	Pass Percentage
1	II Mech	70	5	7.14
2	III Mech	74	15	20.27
3	IV Mech	44	23	52.27



FACULTY PROFILE:

S. No.	Name of the Faculty	Qualification	Designation
1.	Dr. M. Rajagopal	M.E., Ph.D.	Professor
2.	Dr. K. Elangovan	M.E., Ph.D.	Professor
3.	Dr. P. Rajasekaran	M.E., Ph.D.	Associate Professor
4.	Mr. S. Senthil Kumar	M.E.	Assistant Professor
5.	Mr. P. Munusamy	M.E.	Assistant Professor
6.	Mr. R. Balaji	M.E.	Assistant Professor
7.	Mr. M. Muniraj	M.E.	Assistant Professor
8.	Mr. L. Siva Kumar	M.E.	Assistant Professor
9.	Mr. K. Udhaya Kumar	M.E.	Assistant Professor
10.	Mr. C. Manohar	M.E.	Assistant Professor
11.	Mr. C. Velmurugan	M.E.	Assistant Professor
12.	Mr. S. Thimmarayan	M.E.	Assistant Professor
13.	Mr. K. Ranjith Kumar	M.E.	Assistant Professor
14.	Mr. A. Sakthivel	M.E.	Assistant Professor
15.	Mr. V. Mohanraj	M.E.	Assistant Professor
16.	Mr. S. Deepak Kumar	M.E.	Assistant Professor
17.	Mr. M. Meiyalagan	M.E.	Assistant Professor
18.	Mr. U. Vasanth	M.E.	Assistant Professor
19.	Mr. G. Vinoth	M.E.	Assistant Professor
20.	Mr. K. Vinoth	M.E.	Assistant Professor
21.	Mr. D.A. Vijay Aditiya	M.E.	Assistant Professor
22.	Mr. S. Raghu Kumar	M.E.	Assistant Professor

NON-TEACHING FACULTY PROFILE:

S. No.	Name of the Faculty	Qualification	Designation
1.	Mr. V.G. Velmurugan	B.Tech.,	Lab Assistant
2.	Mr. P. Ramu	M.Sc., B.Ed., MSLIC	Lab Assistant
3.	Mr. P. Dhanapal	I.T.I	Workshop Instructor
4.	Mr. Sugavana Subramanian	I.T.I	Lab Assistant
5.	Mr. S. Navaneethan	I.T.I	Lab Assistant

DETAILS OF FACULTY COMPLETED Ph.D. & PURSUING Ph.D.

S. No.	Name of the Faculty	Ph.D. Status
1.	Dr. K. Elangovan	Completed
2.	Dr. P. Rajasekaran	Completed
3.	Dr. M. Rajagopal	Completed
4.	Mr. S. Senthil Kumar	Pursuing
5.	Mr. K. Udhaya Kumar	Pursuing
6.	Mr. R. Balaji	Pursuing

AWARDS FOR FACULTY

S. No.	Name of the Faculty	Name of the Event	Name of the Organizer	Award
1.	Dr. P. Rajasekaran Mr. K. Udhaya Kumar	Quality Circle Forum of India	TVS Motors Limited	Silver Award (2nd Prize)
2.	Mr. R. Balaji Mr. K. Udhaya Kumar Mr. M. Muniraj	Quality Circle Forum of India	TVS Motors Limited	Silver Award (2nd Prize)
3.	Mr. R. Balaji Mr. A. Sakthivel	Quality Circle Forum of India	TVS Motors Limited	Gold Award (1stPrize)

FACULTY PATENT DETAILS

S. No.	Faculty Name	Title of the Patent	Patent Number	Year of publication
1	Dr. K. Elangovan	Configurable EEG Based Automatic Autism Spectrum Disorder Detector & Classifier Using Double Density Dual Tree Complex Wavelet Transform and Deep Neural Network Models	202041024908	2020
2	Dr. K. Elangovan	System and Apparatus for Surface Finishing of 3D Printed Products Through Vapour Smoothing	201841005662	2018
3	Dr. K. Elangovan	Method and System for ReclaimingServiceable Parts of E-Waste for Development of 3D Printer	201741036461	2017
4	Dr. K. Elangovan	Water Management Device andSystem	201641033042	2016
5	Dr. K. Elangovan	Water Management Device andSystem Thereof	201641033042 A	2016
6	Dr. K. Elangovan	Efficient VTOL Ornithopter	369/CHE/2015	2015
7	Dr. P. Rajasekaran	Toothpaste Dispensing Toothbrush	201641015626	2016
8	Mr. M. Muniraj	Soap Dispenser With a Body Scrub	201641024529 A	2016
9	Mr. R. Balaji	A Navigation and InformationAssistive Spectacle	201641024767 A	2017
10	Mr. C. Velmurugan	Smart Compact Structural Instrument	201641024629	2017

FACULTY PUBLICATIONS:

S. No	Name of the Faculty	Title Name	Name of the Journal / Conference / Publisher
1	Dr. M. Rajagopal	Experimental Study on PCM based Thermal Energy Storage using Flat Plate solar Collector	Science, Technology andDevelopment Journal
2	Dr. M. Rajagopal	PCM based Thermal Energy Storage System Integrated with Dish Type Solar Collector andSolar PV Panel with Battery	Science, Technology and Development Journal
3	Dr. K. Elangovan	Experimental investigation on solar powered ejector refrigeration system integrated with different concentrators	Environmental Science and Pollution Research
4	Dr. P. Raja Sekaran	Experiment investigation and analysis of fish scale reinforced polymer composite materials	Materials Today: Proceedings
5	Dr. P. Raja Sekaran	Hardness and buckling strength of different material panels for a wing box structure withFE analysis	Materials Today: Proceedings
6	Mr. P. Munusamy	Parametric optimization of Al 7068 metal matrix using spark plasma sintering process	Materials Today: Proceedings
7	Mr. R. Balaji	Parametric optimization of Al 7068 metal matrix using spark plasma sintering process	Materials Today: Proceedings
8	Dr. K. Elangovan	Experimental analysis on diffusion absorptionrefrigeration cycle with the magnetic field	International Journal of Ambient Energy

EVENTS ORGANIZED:

- Workshop on "Advanced Manufacturing Technology."
- Seminar on "Industrial safety"
- Expert Lecture on "Overview and Scope of Steam Boilers."
- Celebration on "Global environmental safety day."
- Workshop on "Autodesk Fusion 360."
- Webinar on "Basics of Air Handling Unit."
- Webinar on "Introduction to Electric Vehicles."
- National Level Technical Symposium "Solidus-2K22."
- Webinar on "Carrier Opportunity for Mechanical Engineering Students."
- Industrial Visit to "HMT Bangalore" for second year students.
- Industrial Visit "YASKAWA India Ltd, Bangalore" for third year students
- Industrial Visit to "BEML, Mysore" for second & third year students
- Industrial Training at "IMTMA" for final year students.

STUDENT PARTICIPATION

Academic Year 2022-23			
S. No	**Name of the Activity**	**No. of Student Participation**	**No. of Winning Trophies/Prizes**
1.	Paper Presentation	08	2nd Prize
2.	Technical Quiz	10	1st Prize
3.	Competition	8	Nil
4.	Webinar	106	Nil
5.	Workshop	28	Nil
6.	Internship	24	Nil
7.	Hands on Training	10	Nil
8.	Industrial Visit	145	Nil
9.	NSS Volunteer	50	Nil

STUDENTS INNOVATIVE PROJECTS

Project Title	Project Title
Experimental investigation of Luffa fiber glass and reinforced epoxy resin composite	Performance improvement in solar distillation system using phase change material
Evalution and performace analysis of micro cracks in heat treated components using micro analyzer	Study of performance, emission and combustion of diesel engine with radish biodiesel using EGR technique
Experimental investigation of typha latifolia fibres reinforced with epoxy resin composities	Design and analysis of new model wheel rim for four wheeler
Eye blink sensor based automatic braking system	Optimization of Mechanical assembly tolerance by using meta-heuristic algorithm
Experimental Investigation on Four Stroke Diesel Engine With Eucalyptus Oil and Diesel Blending	Solar powdered water pumping system byutilising solar energy
Vibration analysis of glass fibre and kevlar fibre reinforced with epoxy resin and graphite	Design and analysis of flywheel in petrol engine
Optimizing the efficiency of diesel engine by using exhaust gas	Design and analysis of pneumatic air compressor drilling machine
FD analysis of the natural ventilation performance of a commercial multidirectional wind tower	Design and analysis of human prosthetic teethusing 3D printing machine for medical assistance
Prediction of mechanical behaviour of GFRP nano titanium particle	Key and safety bluetooth helmet connected to start a motorcycle engine
Thermal analysis of sheet metal by using ultrasonic welding using ANSYS software	Design and optimization of connecting rod under static and fatigue loading condition using ANSYS
Study on pulsed and non pulsed TIG welding of AA6061-T6 aluminium alloy	Footstep power generation by using rack and pinion arrangement
Design and analysis of crop cutter	Electric power generation using shock absorber
Electric bicycle without external energy source	Investigation on Hand held Seam welding
Performance analysis of a solar parabolic trough collector for different reflecting surfaces and flow rates	Evaluation of mechanical behavior of Glass fiber/Al2O3/SIC/Graphite reinforced polymer composites
GPS based Automatic Vehicle Accident information system two wheeler	Design, analysis and testing mechanical properties of piston using aluminum metal matrix composite materials
Experimental analysis of patched and unpatched composite laminates	Modelling and optimization of wirecut EDM Process

PLACEMENT AND TRAINING:

Placement training plays a major role in shaping up the career goals of students. It is the dream of every engineering student to place in a top organization visiting his or her campus for recruitment. Keeping this key aspect into consideration it realizes that training is important for engineering students to enhance their employability skills and achieve good placement in various Industries. At present, the competition for employment is increasing every day and placement has become a challenging task. Training of students and equipping them with life skills has become an important responsibility of the institution. Along with technical expertise, development of a holistic personality is also necessary. To meet out these requirements, a fully-fledged training cell is operating in our college to enhance the capabilities of engineering graduates on par with the industry standards.

As a part of initial training, various students from final year took part in the **IMTMA** (Indian Machine Tool Manufacturer's Association) training from 25 April 2022 to 04 July 2022 to develop various skills on Design Engineering and Production Engineering.

Training Vendors

Indian Machine Tool Manufacturers' Association

Indian Machine Tool Manufacturers' Association

Face Academy for Career Enhancement

FACE

Col's Calibre

Wiley Learning Excellence

WILEY

TCS Ninja

iON TCS Ninja

GRADUATES OF 2022 PASSED OUT BATCH:

A time to celebrate with all those people, your friends, teachers and parents who have help the students in all the initial year of the student life and have made learning fun.; Yes, it's all about Graduation we are talking, the wonderful occasion for each a student to remember in life.

List of candidates those who have graduated from B.E., Mechanical Engineering of 2018-2022 Batch.

S. No	Register Number	Student Name	Class Obtained
1.	610818114001	ADHISHESHAN L	First Class
2.	610818114004	AKILEYSHKUMAR K S	First Class
3.	610818114006	ARUN IYYAPPAN B	First Class
4.	610818114007	ASHOK KUMAR K	First Class
5.	610818114008	BALAJI G R	First Class
6.	610818114009	BALAJI R	First Class
7.	610818114010	BHARATHKUMAR R	First Class
8.	610818114012	CHETHAN M	First Class
9.	610818114013	CHINNASAMY A	First Class
10.	610818114014	CHINRAJ E	First Class
11.	610818114016	DHILIP KUMAR S	First Class
12.	610818114017	DINESH C	First Class
13.	610818114018	DINESHKUMAR B S	First Class
14.	610818114019	DINIESHKUMAR V	First Class
15.	610818114020	ELAVARASAN R	First Class
16.	610818114021	JAISURYA S	First Class
17.	610818114023	KARTHIK M	First Class
18.	610818114025	LOKESH M	First Class
19.	610818114026	LOKESHKUMAR A	First Class
20.	610818114027	MADHANRAJ B	First Class
21.	610818114028	MANJUNATH M	First Class
22.	610818114029	MANOJ B	First Class
23.	610818114030	MANOJ KUMAR M	First Class
24.	610818114031	MATHIYAZHAGAN G	First Class
25.	610818114032	MOHAN M	First Class
26.	610818114033	MOHAN KUMAR K	First Class
27.	610818114034	MUNIRAJ C	First Class
28.	610818114036	MURALI MOHAN C	First Class
29.	610818114039	NAGAPPA S	First Class
30.	610818114040	NAVEENKUMAR N	First Class
31.	610818114041	NAVEEN KUMAR M	First Class

S. No	Register Number	Student Name	Class Obtained
32.	610818114042	PALANIVEL C	First Class
33.	610818114043	PAVAN KALYAN M	First Class
34.	610818114044	PRABHAKARAN P	First Class
35.	610818114045	PRAKASH N	First Class
36.	610818114046	PRASANTH P	First Class
37.	610818114047	PRASHANTH R	First Class
38.	610818114048	PRAVEEN M	First Class
39.	610818114049	RAJA S	First Class
40.	610818114050	RAKESH M	First Class
41.	610818114051	RANJITHKUMAR S	First Class
42.	610818114053	SAKTHI R	First Class
43.	610818114054	SAKTHIVEL T	First Class
44.	610818114055	SANJAY M	First Class
45.	610818114057	SATYA NARAYANA S R	First Class
46.	610818114058	SHANKAR S	First Class
47.	610818114059	SHANMUGA SUNDARAM C	First Class
48.	610818114060	SUDHARSAN K	First Class
49.	610818114061	SURESH D	First Class
50.	610818114062	SYED ARBAN R	First Class
51.	610818114063	THIMMA RAJ R	First Class
52.	610818114064	VENKATESAN K	First Class
53.	610818114301	MANIGANDAN K	First Class
54.	610818114302	MUNICHANDRAN M	First Class
55.	610818114303	MUNISWAMY E	First Class
56.	610818114305	SATHISH V	First Class
57.	610818114306	SHASHI KUMAR P	First Class
58.	610818114501	SINIVASAN M	First Class
59.	610818114502	ANIK BHATTACHARYA M	First Class

List of candidates those who have graduated from M.E., Engineering Design of 2020-2022 Batch.

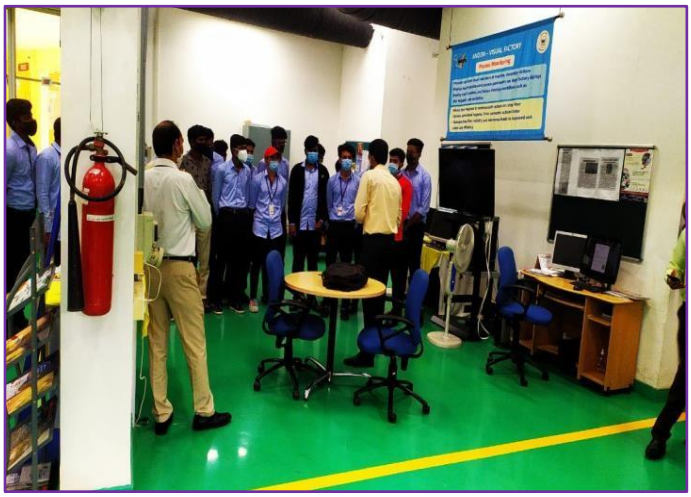
S. No	Register Number	Student Name	Class Obtained
1.	610820408001	ANTONY JULIAN G	First Class
2.	610820408003	BABU V	First Class
3.	610820408004	JAYARAMAN M	First Class
4.	610820408005	JUSTIN SAM A	First Class
5.	610820408006	MATHANCHANTH S	First Class
6.	610820408007	MOHAMMED BILAL S	First Class

7.	610820408008	MUNIDAS C	First Class
8.	610820408009	MUTHUKUMAR D	First Class
9.	610820408010	RAMACHANDRAN R	First Class
10.	610820408012	TAMILARASAN S	First Class
11.	610820408013	VELMURUGAN VG	First Class

INDUSTRIAL VISITS:

Indian Machine Tool Manufacturers' Association, Bengaluru	Hindustan Machine Tools, Bengaluru	BEML limited, Mysuru	Ashok Leyland, Hosur
TVS Motor Company, Hosur	EFICO Machine Tools Pvt Ltd, Coimatore	Shardlow India Ltd, Hosur	Anna Aluminium Company Pvt Ltd, Kerala
Suguna Pumps & Motors, Coimbatore	Premier Machine Tools, Coimbatore	FANUC India Limited	AMSTEEL Castings Pvt Ltd, Hosur
Innoforge Pvt Ltd, Hosur	Mahalakshmi Plastics Engineering Pvt ltd, Hosur	TVS UPPASSANA Limited, Hosur	Sodecia India Private Limited, Coimbatore

PHOTO GALLERY OF INDUSTRIAL VISIT



LABORATORIES:

The department of Mechanical Engineering in PMC Tech has team of highly qualified and experienced faculties from the institutes of national repute. There are course-oriented laborites where the students do experimental work leading to a better understanding of physical situations.

Besides, the department has also provided Creo 2.0, FANUC, ANSYS & DFMA software in its labs. The mission of the Department is to establish itself as a center of excellence in the field of Mechanical Engineering, through innovative teaching learning methods, intensive CAD/CAM short-term programs, **Institute-Industry** partnerships, and carrying on projects on Mechanical Engineering. The well-equipped laboratories, dedicated, qualified and committed faculty and supporting staff form the core of the branch.

Department of Mechanical engineering has the following lab setup to help the students to understand the engineering concepts by conducting experiments on different domains.

- Engineering Practices Laboratory
- Manufacturing Technology Laboratory
- Fluid Mechanics and Machinery Laboratory
- Computer Aided Machine Drawing Laboratory
- Strength of Materials Laboratory
- Thermal Engineering Laboratory
- Dynamics Laboratory
- Metrology and Measurements Laboratory
- CAD/CAM Laboratory
- Simulation and Analysis Laboratory
- Mechatronics Laboratory

LABORATORY GALLERY:

CNC Laboratory

Work Shop

Manufacturing Technology Laboratory-I

Dynamics Laboratory

Strength of Materials Laboratory

Fluid Mechanics and Machinery Laboratory

Thermal Engineering Laboratory

Manufacturing technology Laboratory-II

Product Development

CAD/CAM Laboratory

Manufacturing Laboratory

GD&T Self Learning

DEPARTMENT GALLERY:


Karthick DV is presenting
DESIGN AND PRODUCTION:
Design - For a person who is good in reading complex drawings and it needs lot of brain work instead of physical work. If you are enjoying by designing a product in a software it is a piece of cake for you.
If you want to be a white collar mechanical engineer, this is for you. And you will face less number of people in day to day work. This is good for introvert guy but you too speak out your thoughts infront of people in meetings and presentations.
Production - if you are good in handling all sort of people, ready to get your hand dirt and love to hear the sounds of shop floor, this is for you.
You will get more responsibility and respect from plant. If you know how to handle workers you will get good respect and output from them.
Have a nice relationship with all the department particularly from planning.
Karthick DV
Syed Azam
R.Bharath Kumar
Anik Bhattachary...
Dr. M. Rajagopal
Manjunath Manju
P Prasanth
19 others
You
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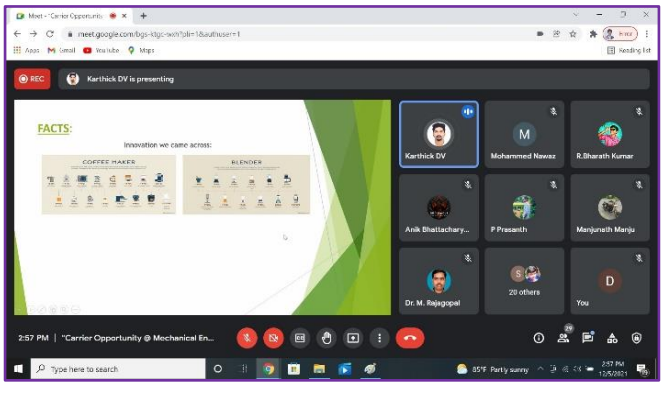
Karthick DV is presenting
FACTS:
Innovation we came across:
COFFEE MAKER
BLENDER
Karthick DV
Mohammed Nawaz
R.Bharath Kumar
Anik Bhattachary...
P Prasanth
Manjunath Manju
Dr. M. Rajagopal
20 others
You
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