

S.A. ENGINEERING COLLEGE

(An Autonomous Institution , Affiliated to Anna University , Chennai)

Accredited by NAAC with 'A' Grade & ISO 9001:2015 Certified Institution

Approved by AICTE and Affiliated to Anna University, Chennai



DYNAMIX'21

EVEN SEMESTER

Newsletter 2020 - 2021

DEPARTMENT OF

MECHANICAL ENGINEERING

ABOUT THE DEPARTMENT



The department of Mechanical Engineering was established in the year 1998 in our college; it was affiliated to Anna University in 2001 and got permanent affiliation in 2013. It has been accredited by the National Board of Accreditation (NBA) from the year 2009. The post graduate programme, M.E. CAD/CAM was established in the year 2014 with an intake of 18 students. The department has been recognized as a research center by Anna University in the year 2012. The students are given hands on training about the theoretical concepts they are learning through various labs such as Manufacturing Technology Lab, Fluid Mechanics Lab, I C Engines lab, Heat Transfer Lab, CAD CAM LAB, Dynamics Lab, Mechatronics Lab.

The department has eminent faculties to guide the students in learning the various concepts of mechanical engineering. The faculty are well versed in research and publish papers periodically in reputed journals like WOS, SCI, SCOPUS. The faculty of mechanical engineering also have patent grants for their research and innovation projects in emerging fields of mechanical engineering. In addition to this, various funded projects are also being carried out with the grants received from AICTE, DST, TNSCST etc. The students are also encouraged to participate in various events such as design and fabrication of parallel hybrid electric race car, Solar vehicle championship conduct by ISIE every year.

VISION

1. **Academic Excellence:** To strive and attain a premier position in providing Quality Higher Education integrated with Research and Scholarly activities in the emerging areas and diversify in the emerging fields of Mechanical Engineering, thus serving to the needs of the society.
2. **Inventory of Skill Development:** To make our graduates to be adept in handling real life complex problems through Modern Tools and Techniques and while doing so making them to imbibe ethical practices and confident enough to assume leadership position.

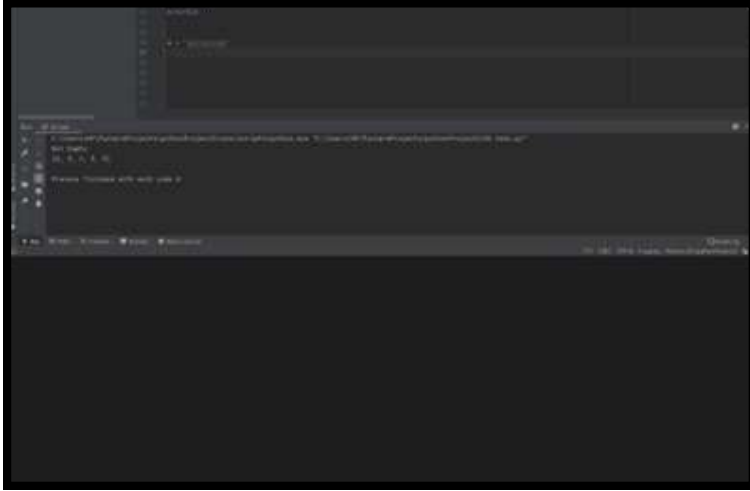
MISSION

1. **Conducive Environment:** To provide conducive atmosphere for effective teaching-learning by disseminating the knowledge in breadth and depth.
2. **Centre of Excellence:** To practice modern tools and techniques so as to make our department a Centre of Excellence and sustainable in their growth.
3. **Critical and Clinical Thinking:** To transform our students to be open minded with critical thinking in their approach to real-life problem-solving situations keeping in mind the Professional, Ethical, Environmental and Societal aspects
4. **Active Involvement in R&D:** To provide a perfect platform for our faculty and students to undertake research activities.
5. **Collaboration and Integration:** To collaborate with the industries, premier Institutions in taking up consultancy projects, internship so that our students will acquire experience hands-on in current industrial practices and ethical standards.
6. **Implementation of Students Quality Circle:** To make our students imbibe leadership qualities by fostering in them a good amount of soft skills, personality traits and by way of active participation in extra-curricular and co-curricular activities.

PROGRAMME EDUCATIONAL OBJECTIVES

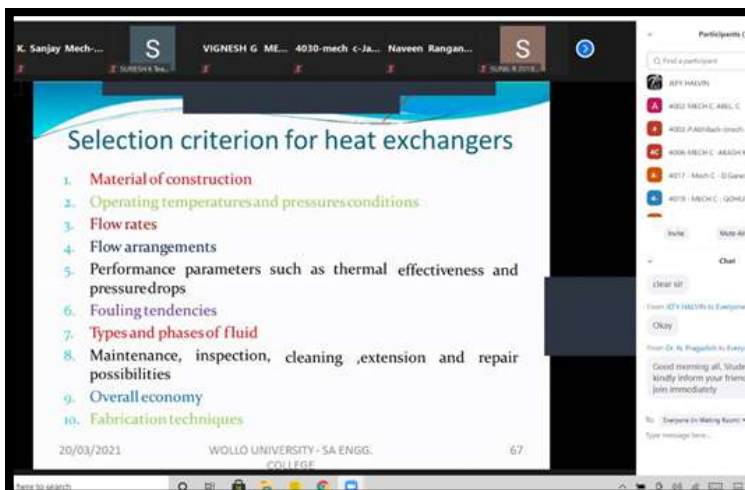
1. **Technical and Professional Excellence:** Graduates will demonstrate technical competence in solving real life Mechanical Engineering problems using Engineering principles and modern tools while engaging in continuous professional development to stay updated of the industry trends.
2. **Leadership and Communication:** Graduates will exhibit strong leadership qualities enabling them to manage projects, work in inter disciplinary teams and communicate complex technical information using contemporary tools in a global environment.
3. **Ethical and Social Responsibility:** Graduates will demonstrate a commitment to professional ethics, understand the broader impacts of engineering solutions on society and the environment and apply their engineering skills to address global challenges in sustainability, health, and safety
4. **Lifelong Learning:** Graduates will successfully establish themselves in professional engineering roles in various industries by engaging in lifelong learning or by participation in professional organizations to continuously improve their knowledge and skills.

WEBINAR



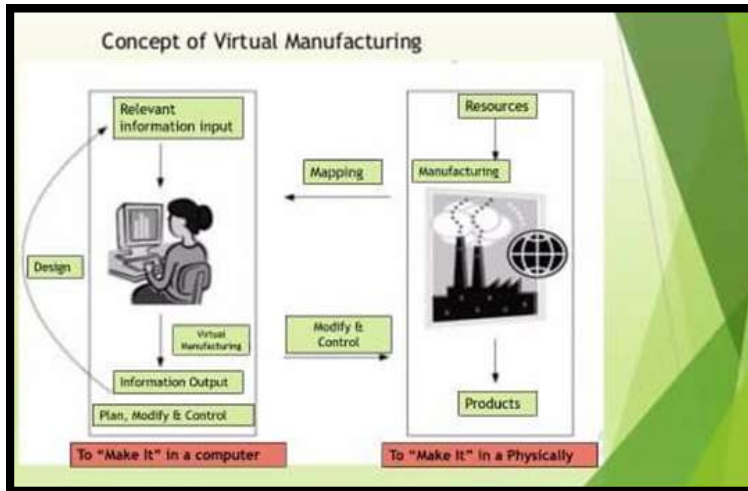
On the month of March, April, May, The department of Mechanical Engineering has organized the workshop on the topic “ASHTRIX Robotics”, which is organized by Robotics and Research Centre Flat T2 Block 1 No 30 Arunachalam Road Saligramam.

On 19.3.2021, The department of Mechanical Engineering has organized the Guest Lecture on “CAREER AWARENESS”. felicitated the chief guest Mr. Gokulakannan Narasimhan, HR Recruiter, INTUIT.



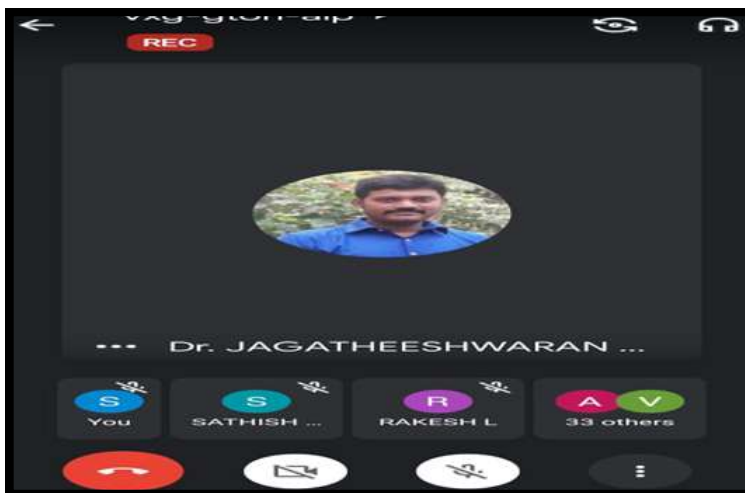
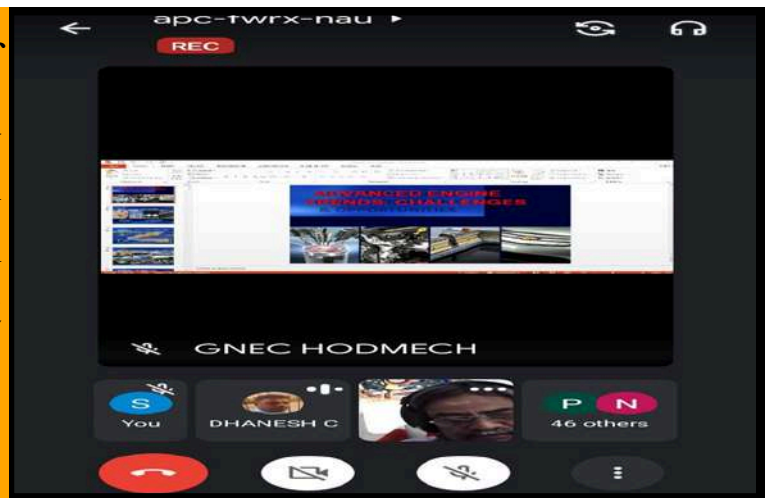
On 20.3.2021 The department of Mechanical Engineering has organized the Guest Lecture on “HEAT EXCHANGERS AND ITS APPLICATIONS”, the chief guest Dr. A. Haiter Lenin, Professor, Department of Mechanical Engineering, WOLLO University, Kombolcha, Ethiopia.

WEBINAR



On 27.03.2021 The department of Mechanical Engineering has organized the Guest Lecture on “VIRTUAL MANUFACTURING”. Felicitated the chief guest Ms. Sridevi M, Senior Manufacturing Engineer, Caterpillar, Ascendes IT PARK, TARAMANI.

On 06.05.2021, The department of Mechanical Engineering has organized the Guest Lecture on “Recent Trends in IC Engines”. Felicitated the chief Logesh Ramamoorthy, Technical Project Leader, Product Development (US/LT-Team) Apollo Tires, Germany.



On 08.05.2021, The department of Mechanical Engineering has organized the Guest Lecture on “Simulation in Manufacturing Engineering”. Felicitated the chief Ms. Sridevi M, Senior Manufacturing Engineer, Caterpillar, Ascendes IT PARK, TARAMANI.

SPORTS

- On March 16, 2021, our students has participated and secured the second place in the Men's Basketball Team Zonal Match at S.A. Engineering College.

The participants are P.Gurutesh - II Year.,K.Lokesh - IV Year.,H.Amirullakhan - II Year.

- On March 18 & 19, 2021, our students has participated and secured runner up in Ball Bad Minton at St.Peter's Engineering College.

The participants are S.Venkatesh - II Year., V.Prakash - III Year.,S.Sriram - II Year.,S.S.Thanigaivel - II Year.,S.Nitish - II Year.,K.R.Jawahar - III Year.,D.Shyam Kumar - III Year.

- On March 20, 2021, our students has participated and secured the winner up in the Hockey Men Match at Velammal Engineering College.

The participants are B.Gokul - IV Year., R.Keerthivasan - IV Year.,Ratheesh Kumar - IV Year.,Shaikh Shafikh Ahmed - III Year., G.Shiva Sankar - III Year.,R.Prem Sundar - III Year.,J.Oobeth - III Year., K.Karthik Kumar - III Year

- On March 22 & 23, 2021, our students has participated and secured runner up in Volly Ball Mens match at Velammal Institute Of EngineeringCollege
The participants areP.J.Kameshwaran - II Year.,M.Yuvaraj - II Year.,R.Logith Inian - II Year
- On March 26-29, 2021, our students has participated and secured the third place in the Anna University Men Cricket Zone Tournament at Gojan Engineering College.
The participants are S.Subash - IV Year.,L.P.Nikesh Raj - IV Year.,S.Paxkiya Pravin - IV Year.,S.Paxkiya Pravin - IV Year.,K.V.Pradeep - III Year.,G.Tamilarasan - II Year
- On March 31, 2021, our students has participated and secured the winner up in the Kho-Kho Men Match at Velammal Engineering College.
The participants is V.Venkatesh- III Year

Patent-Faculty Intellectual Property Rights

S.N O	APPLICANT NAME	TOPIC WITH IPR APPLICATION NUMBER
1.	R.Jeeva S.A . Engineering College	Topic : Multi Terrain Quadcopter Application No : 319052-001 Status: Filed
2.	Dr. Jagatheeshwaran MS S.A. Engg College	Topic : Implementation Of Water Quench-Heat Treatment After Electroless Coating Process Application No : 202041044661 Status : Filed
3.	Dr.P.Sevel Mechanical	Topic : DISINFECTANT SPRAYING ROBOT DISINFECTANT SPRAYING ROBOT Application No : 335844-001 Status : Granted for 10 years
4.	Dr.P.Sevel, Professor, Dept of Mechanical Engineering, S.A. Engineering College, Chennai	Topic : Height adjustable Wheel Chair Application No : 350259-001 Status : Granted
5.	Dr.P.Sevel, Professor, Dept of Mechanical Engineering, S.A. Engineering College, Chennai	Topic : Hybrid PV and Wind based maximum power extraction control algorithm for smart microgrid Application No : 1187619 Status : Filed

AWARDS/ INVITATION RECEIVED BY FACULTY:

NAME OF THE RESOURCE PERSON	NAME OF THE AWARD/INVITATION RECEIVED
Dr.P.Sevel	BEST RESEARCHER AWARD for distinct contribution in the field of Materials Science in the 6th Annual Millennium Impact Award 2020 organized by Shri Paramhans Education and Research Foundation Trust, New Delhi

S.NO	NAME OF THE FACULTY	AWARDS /INVITATION RECEIVED		
		DATE	NATURE OF AWARD/ INVITATION	GRANTING AUTHORITY/JOURNAL/CONFERENCE
1	Dr. S. Baskar	20-06-2021	Session chair Invitation	Recent Innovations in Science & Technology (RIST 2021) organized by ERANAD Knowledge City Technical Campus, Malappuram, Kerala, India in association with ISET Research & HEXAIND Technologies and Services

AWARDS & PATENTS RECEIVED BY STUDENTS:

S.NO	NAME OF THE STUDENT	AWARDS /INVITATION RECEIVED		
		DATE	NATURE OF AWARD/ INVITATION	GRANTING AUTHORITY/JOURNAL /CONFERENCE
1.	S. PraveenJ. JohannAbisha Sara Seelan	24-02-2021	1ST Prize on “MHRD sponsored 11th International Project Competition – VISAI 2021”	MHRD&Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Chennai
2.	Akash V	25-04-2021	Certificate of completion of “Build a face recognition application using Python”	AI for India Event conducted by GUVI
3.	Venkatesh B	17-06-2021	Certificate of participation in 5 day online course titled “Geospatial Technology for Archaeological Studies”	ISRO and Indian Institute of Remote sensing, Dehradun
4.	Arul Muthu Kumaran	14-04-2021	Certificate of participation in “OnlineSummer Course on PYTHON "-Phase I, from 09-04-2021 to 14-04-2021	S.A. Engineering College
5	Mr. Pradeep K V	05-06-2021 to 05-07-2021	Certificate of completion of “Online Internship for Undergraduate students” in the area of “Noise control of Drones”	INDIAN INSTITUTE OF TECHNOLOGY INDORE
6	Mr.S.M. Dinesh	28th June to 29th June 2021	Certificate of participation in “Virtual Workshop on Basics of IoT & Cloud Computing”	TVS Training and Services Ltd
7	Mr. Viswak			
8	Vignesh			
9	Muthukamalesh			

FACULTY ATTENDED

FDP / SEMINAR / WORKSHOP

S.NO	NAME OF THE FACULTY	SEMINAR/WS/ CONFERENCE/ CEP/FDP/QIP ATTENDED	NAME OF THE PROGRAMME	VENUE	DATE / DURATION
1.	Dr. S. Vishvanathperumal	Short Term Training Program	Advanced Manufacturing Techniques for Medical and Precision Engineering	Online	04/01/2021 – 09/01/2021 / 6 days
2.	Mr. R. Jeeva	FDP	FRP Composites	Online	18/01/2021 – 22/01/2021 / 5 days
3.	Dr. S. Baskar	Short Term Training Programme	Optimization with MATLAB	Online	14/02/2021 – 19/02/2021 / 5 days
4.	Mr. K. SURESH	Short Term Training Programme (STTP)	Electric Vehicle Evolution - Impact on Power Grid	Online	22/03/2021 – 27/03/2021 / 6 days
5.	Mr. C. Dhanesh	FDP	One Week Recent Trends in Research Article Writing	Online	22/03/2021 – 27/03/2021 / 6 days

6.	Dr. S. Baskar	FDP	Engineering Materials Processing – A Research Perspective	Online	26/04/2021 – 30/04/2021 / 5 days
7.	Mr. R. Jeeva	FDP	Engineering Materials Processing – A Research Perspective	Online	26/04/2021 – 30/04/2021 / 5 days
8.	Mr. C. Dhanesh	FDP	Applied Thermodynamics	Online	03/05/2021 – 08/05/2021 / 6 days
9.	Mr. S. Dhanasekar	AICTE-ISTE approved Orientation/Refresher Programme	Design and Development of Products and Services	Online	04/05/2021 – 10/05/2021 / 6 days
10.	Mr. R. Jeeva	FDP	Novel Materials and Manufacturing Processes in Industrial Applications	Online	10/05/2021 – 14/05/2021 / 5 days
11.	Dr. S. Baskar	FDP	Advanced Applications in Composite Materials	Online	17/05/2021 – 22/05/2021 / 6 days
12.	Mr. R. Jeeva	FDP	Green Technology for Enhancing Livelihoods	Online	31/05/2021 – 04/06/2021 / 5 days
13.	Mr. Vasanthe Roy	Webinar	Qualitative and Mixed Methods Research	Online	27/03/2021 / 1 day
14.	Mr. S.R. Venkataraman	Webinar	National Education Policy (NRP 2020)	Online	12/06/2021 / 1 day
15.	Mr. S.R. Venkataraman	FDP	Advancements in compositeMaterials	Online	28/06/2021 -02/07/2021 / 5 days

16.	Mr. R. Jeeva	FDP	Engineering Materials Processing – A Research Perspective	Online	26/04/2021 – 30/04/2021 / 5 days
17.	Mr. R. Jeeva	FDP	Design of Experiments	Online	28/06/2021 – 02/07/2021 / 5 days
18.	Mr. S. Dhanasekar	AICTE-ISTE approved Orientation/Refr eshner Programme	Design and Development of Products and Services	Online	04/05/2021 – 10/05/2021 / 6 days
19.	Mr. C. Dhanesh	Webinar	Recent Advancements and Optimization Practices inRenewable Energy Industries	Online	11/06/2021 / 1 day
20.	Mr. KAV Roossvelt Prabhu	Webinar	National Education Policy (NEP 2020)	Online	12/06/2021 / 1 day
21.	Mr. D. Prakash	Webinar	Recent Advancements and Optimization Practices inRenewable Energy Industries	Online	11/06/2021 / 1 day
22.	Mr. D. Prakash	Webinar	National Education Policy (NEP 2020)	Online	12/06/2021 / 1 day
23.	Mr. D. Prakash	Webinar	Presentation and Public Speaking Skills	Online	27/06/2021 / 1 day
19.	Dr. S. Baskar	Webinar	Recent Innovations in Science & Technology (RIST 2021)	Online	19/06/2021 – 20/06/2021 / 2 days
20.	Dr. S. Baskar	FDP	Advanced Applications in Composite Materials	Online	17/05/2021 – 22/05/2021 / 6 days

FACULTY PUBLICATION

S. NO	NAME OF THE FACULTY	PAPERS PUBLISHED			
		Title of the paper	Name of the Journal/Conference with vol no, issue no, page no and impact factor.	Date of publication/ presentation	DOI and Annexure details(refer Annexure details of Anna University, Chennai)
1.	Dr.Jagatheeshwaran M S	A novel water quench approach for enhancing the surface characteristics of electroless nickel phosphorous deposit	Surfaces and Interfaces	28-01-2021	SCIhttps://doi.org/10.1016/j.surfin.2021.100975
2.	Dr. P. Sevvell	Development of Thermo Mechanical Model for Prediction of Temperature Diffusion in Different FSW Tool Pin Geometries During Joining of AZ80A Mg Alloys	Journal of Inorganic and Organometallic Polymers and Materials	18-02-2021	SCIhttps://doi.org/10.1007/s10904-021-01931-4
3.	Dr. P. Sevvell	Biochar-assisted copper-steel dissimilar friction stir welding: mechanical, fatigue, and microstructure properties	Biomass Conversion and Biorefinery	21-04-2021	SCIhttps://doi.org/10.1007/s13399-021-01514-w
4.	Dr S Baskar	Sustainable Machining of Hastelloy in EDM Using Nanoparticle-Infused Biodegradable Dielectric Fluid	Arabian Journal for Science and Engineering	05-05-2021	SCIhttps://doi.org/10.1007/s13369-021-05652-1
5.	Dr. S. Vishvanathperumal	Effect of Nanosilica on the Mechanical Properties, Compression Set, Morphology, Abrasion and Swelling Resistance of Sulphur Cured EPDM/SBR Composites	Silicon (2021)	04-05-2021	SCIhttps://doi.org/10.1007/s12633-021-01138-9

6.	Dr. P. Sevvel	Investigation and optimization of Laser welding process parameters for AA7068 aluminium alloy butt joint	Materials Today: Proceedings	02-02-2021	Scopus https://doi.org/10.1016/j.matpr.2020.07.196
7.	Dr. P. Sevvel	Investigation and Evaluation of Mechanical behaviour of Al-TiC Alloy	Materials Today: Proceedings	15-01-2021	Scopus https://doi.org/10.1016/j.matpr.2020.06.372
8.	Dr. P. Sevvel	Influence of CNT coating on the efficiency of solar parabolic trough collector using al ₂ o ₃ nanofluids - a multiple regression approach	Materials Today: Proceedings	5-01-2021	Scopus https://doi.org/10.1016/j.matpr.2020.09.047
9.	Dr. S. Vishvanathperumal	Influence of Abrasive Water Jet Machining Parameters on Hybrid Polymer Composite	Journal of The Institution of Engineers (India): Series C	25-03-2021	Scopus https://doi.org/10.1007/s40032-021-00672-0
10.	Mr. Dhanesh C	Role of combustion derived magnesia nanoflakes on the combustion, emission and functional characteristics of diesel engine susceptible to palm oil biodiesel-diesel blend	Journal of Thermal Science and Technology	01-03-2021	SCI https://doi.org/10.1299/jtst.2021jtst0025

S. NO	TITLE OF THE BOOK	NAME OF THE AUTHORS	COMPLETE AFFILIATION OF THE AUTHORS	DATE OF PUBLICATION	NAME OF THE PUBLISHER WITH ADDRESS	ISBN NUMBER
1	Book: Trends & Developments in Selective Laser Melting (SLM) – A Detailed Review	Mr.J.Gunasekaran & Dr.P.Sevvel	Professor, Mechanical Dept.SAEC	6th April 2021	Bonfring Publications.	ISBN: 978-81-95162-65-9



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