



SRI SHANMUGHA COLLEGE OF ENGINEERING AND TECHNOLOGY



SRI SHANMUGHA®

COLLEGE OF ENGINEERING AND TECHNOLOGY

AN AUTONOMOUS INSTITUTION, AFFILIATED TO ANNA UNIVERSITY

APPROVED BY AICTE, ACCREDITED BY NAAC WITH 'A' GRADE

DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER

The Mechanist

2023-2024

Department of **Mechanical** Engineering



Shanmugam K, Founder & Chairman
Sri Shanmugha Institutions

CHAIRMAN MESSAGE

Greetings! Education builds a bridge between ignorance and wisdom. Sri Shanmugha Educational Institutions has been established with fulfilling such an objective. It is an undeniable fact that education always serves the purpose of enlightening the rural mass by showing the light of knowledge and wisdom towards the path of success. This aspiration has paved the primary base for the emergence of Sri Shanmugha College of Engineering and Technology, which, in innovative teaching and learning practices and industry connect endeavors. As the Founder-Chairman, I am highly privileged that the Sri Shanmugha campus functions as an instrument for making potential engineers with human ethics, who are absolutely the masterminds of building our nation.

VICE CHAIRMAN MESSAGE



Prabhakar S, Vice-Chairman
Sri Shanmugha Institutions

Greetings! Nelson Mandela says, “Education is the most powerful weapon we can use to change the world.” True to this quote, knowledge plays a pivotal role in shaping the youth for the better future of our country. It has the power to reshape the world. To attain it, education plays a dominant role as the source of inspiration and transformation.

My dream to establish a fountainhead of education has been fulfilled with Sri Shanmugha platform for the young minds to aspire and acquire knowledge in engineering and technology. Sri Shanmugha makes the dreams of young individuals come true in a way of equipping competence to meet their personal and professional life. It is the forerunner in setting up and exemplifying benchmark in the fields of engineering and technology. The learners derive pleasure in learning current trends via a range of curricular, co-curricular and extra-curricular activities with regard to satiating the industrial standards and expectations.

EXECUTIVE DIRECTOR MESSAGE



Thirumoorthy A, Executive Director
Sri Shanmugha Institutions

Greetings! Preparing our students for today's competitive world is our primary focus. Identifying right opportunities for students and ensuring that these opportunities have complete visibility through excellence in operations is my targeted approach for our young bright minds.

Rightly said by Marian Edelman that "Education is for improving the lives of others and for leaving your community and world better than you found it", we resonate this by ensuring no student who walks into our campus is left without the opportunity of learning. Our actions are focused on creating an ambience suitable for fostering quality education along with activities that transform our students as responsible citizens of our country.



SRI SHANMUGHA COLLEGE OF ENGINEERING AND TECHNOLOGY

Vision:

Our founding ethos remains at the core of the Institution's vision. To be an institute of repute in all fields of education by implementing the best practices akin to global standards for fostering domain knowledge and developing research attitude among students to make them globally competent.

Mission:

M1	Achieving excellence in Teaching & Learning process using state-of-the-art resources.
M2	Extending opportunity to upgrade faculty knowledge and skills.
M3	Implementing the best student training practices for requirements of industrial scenario of the state.
M4	Motivating faculty and students in research activity for real time application.

DEPARTMENT OF MECHANICAL ENGINEERING

Vision:

To prepare competent Mechanical engineers capable of working in an interdisciplinary environment contributing to society through innovation, leadership and entrepreneurship

Mission:

DM1	To offer quality education which enables them in professional practice and career.
DM2	To provide learning opportunities in the state-of-the-art research facilities to create, interpret, apply and disseminate knowledge in their profession.
DM3	To Prepare the students as professional engineers in the society with an awareness of environmental and ethical values.

Program Educational Objectives (PEO's):

PEO1	To prepare students to take up career in Industry, Academia as well as in Public service.
PEO2	To provide core domain and interpersonal skills to design & develop mechanical systems for interdisciplinary applications following ethical code.
PEO3	To develop qualities to progress in entrepreneurship and research activities.

About the Department:



Mechanical engineers are constantly pushing the boundaries of what is physically possible in order to produce safer, cheaper, and more efficient machines and mechanical systems. Huge opportunities exist for mechanical engineers and they are being employed in nearly every industry. The department of Mechanical Engineering was established in the year 2011. The department is well poised to shape the students to become highly motivated Scientists, engineers, entrepreneurs, & policy makers needed to address complex societal issues.

- The Department offers Under Graduate program in Mechanical Engineering leading to B.E. degree graduate program with intake of 60 and also Post graduate program M.E., in Industrial safety Engineering with intake of 12.
- The department strives to enhance student interests in advances in mechanical engineering, and impart high quality education through well-qualified & highly motivated faculty team, well- equipped laboratories, and instructional facilities.
- The department underscores the importance of recognizing that mechanical engineering education must be coupled with modern industry with practices giving hands-on opportunity for every student to relate theory with practice.
- The department's all around sound performance in every sphere of academic activity has a well enough proof that it is student focused.





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Department Association Activities:

- Seminar on **Surface Modelling Insights for Automotive Industries** was conducted for our students on **12th March 2024**.

Industrial Resource persons: 1. Mr.P.Kumaresan, Senior Engineer, Renault Nissan Pvt.

Limited, Chennai.

2. Mr.S.Baskar, Senior Engineer, Mahindra Pvt. Limited,

Chennai.

No. of students Benefitted 150

(Event PHOTOS)



- Seminar on **Cybernetic Seminar on Design Thinking** was conducted for our students on **31st March 2023**.

Industrial Resource person: Er.N.C.Vijay, M.E, DGM – Design (BIM), Chennai
Metro Rail Limited, Chennai.

No. of students Benefitted 150

(Event PHOTOS)

- Seminar on **Understanding engineering Design, Handling and the scenario** was conducted for our students on **06th April 2023**.

Industrial Resource person: Mr.E.V.Ravindran – Design Consultant, Flat TFB,
Coimbatore

No. of students Benefitted 150

(Event PHOTOS)

- Seminar on **How to Apply and Write Patent** was conducted for our students on **18th April 2023**.

Industrial Resource person: Mr. R. Arun Kumar, Master Trainer, EDII, Government
of India, Certified Patent Agent., Chennai

No. of students Benefitted 100

(Event PHOTOS)



- Seminar on **Drone Technology in Agriculture** was conducted for our students on **21st April 2023**.

Industrial Resource person: Er. K. Sathiyaseelan, Manager, Aero Knots, Chennai

No. of students Benefitted 200

(Event PHOTOS)

- Seminar on **Surface Modelling Insights for Automotive Industries** was conducted for our students on **12th March 2024**.

Industrial Resource persons: 1. Mr.P.Kumaresan, Senior Engineer, Renault Nissan Pvt. Limited, Chennai.

2. Mr.S.Baskar, Senior Engineer, Mahindra Pvt. Limited, Chennai.

No. of students Benefitted 150

Our college Sri Shanmugha College of Engineering and Technology in association with IEEE, conducted a national level technical symposium (symposium name) on **28th April 2023**. **Dr.Anbalagan Thangavel, Senior Technical Project Manager, Robert Bosch Engineering and Business Solution Ltd, Coimbatore** and **Shri. Mukunthan Elangovan, Incubation Scientist, EDII-Anna Business Incubation Research Foundation, Tiruchirappalli** presided over the symposium and gave motivational speech to the students.

Our Department of Information Technology organized activities such as

- CAD Modelling

(Event PHOTOS)



- Seminar on **Intellectual Property Rights** was conducted for our students on **21st January 2023.**

Industrial Resource persons: Smt. K.Susi, Trainer, NIPAM, Chennai

No. of students Benefitted 250

(Event PHOTOS)

- Seminar on **Entrepreneurship Development Cell** was conducted for our students on **10th February 2023.**

Industrial Resource persons: Mr. S. Gowtham, Regional Coordinator of EDII-TN,
SCT- HUB, Salem

No. of students Benefitted : 150

(Event PHOTOS)



Students Achievements:

Internship:

S.No.	Name of the student	Name of the company	Internship Period		Duration (in weeks)
			From	To	
1.	TAMILARASAN.V	Windcare India Private Limited, Pollachi	29/06/2023	16/11/2023	20 Weeks
2.	KIRUBAKARAN V	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	26/12/2023	30/12/2023	1 week
3.	AKASHKUMAR G	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	26/12/2023	30/12/2023	1 week
4.	SABARISH V	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	26/12/2023	30/12/2023	1 week
5.	KARTHI P	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	26/12/2023	30/12/2023	1 week
6.	PARAMESHWARAN S	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	26/12/2023	30/12/2023	1 week
7.	SIVA G	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	26/12/2023	30/12/2023	1 week
8.	AJITH M	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	26/12/2023	30/12/2023	1 week
9.	AKASHKUMAR G	My TVS, Sankari	20/06/2023	06/07/2023	2 Weeks
10.	DHINAKAR R	Krish Precisions, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
11.	KARTHI K	Krish Precisions, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
12.	SABARISH V	Krish Precisions, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
13.	TAMIZHARASAN V	Krish Precisions, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
14.	VIKRAM M	Krish Precisions, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
15.	MAHESH KUMAR C	Krish Precisions, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks



16.	KIRUBAKARAN V	Krish Precisions, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
17.	AJITH M	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
18.	KARTHI P	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
19.	PARAMESHWARAN S	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
20.	SIVA G	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
21.	NEELAMEGAM C	Sri Shanmugha Engineering Works, Tiruchengode, Namakkal	03/07/2023	18/07/2023	2 Weeks
22.	TAMILARASAN.V	Windcare India Private Limited, Pollachi	13/03/2023	30/04/2024	8 Weeks
23.	DEEPAK J	Windcare India Private Limited, Pollachi	13/03/2023	30/04/2024	8 Weeks
24.	ALAGESH.D	Windcare India Private Limited, Pollachi	13/03/2023	30/04/2024	8 Weeks
25.	JAGADEESH.S	Windcare India Private Limited, Pollachi	13/03/2023	30/04/2024	8 Weeks
26.	KALIMUTHU.S	Windcare India Private Limited, Pollachi	13/03/2023	30/04/2024	8 Weeks

Other college events participation:

S.No	Year	Name of the Event	Name of the Student	Year of Study	Name of the Organizer	Award Won
1.	2024	Designing CAD Models	V TAMILARSAN	IV Year / Mech	Excel Engineering College	I Prize
2.	2024	Workshop – E-vehicle Hub	P KARTHI	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
3.	2024	QUIZ- Techfest	P KARTHI	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated



4.	2024	Workshop – Evehicle Hub	V SABARISH	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
5.	2024	QUIZ- Techfest	V SABARISH	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
6.	2024	CAD Modelling	V SABARISH	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
7.	2024	3D Printing	V SABARISH	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
8.	2024	Workshop – Evehicle Hub	G SIVA	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
9.	2024	QUIZ- Techfest	G SIVA	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
10.	2024	Workshop – Evehicle Hub	C NAGA MAHESH KUMAR	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
11.	2024	3D Printing	C NAGA MAHESH KUMAR	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
12.	2024	CAD Modelling	C NAGA MAHESH KUMAR	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
13.	2024	QUIZ- Techfest	C NAGA MAHESH KUMAR	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
14.	2024	Workshop – Evehicle Hub	V KIRUBAKARN	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated



15.	2024	CAD Modelling	V KIRUBAKARN	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	II Prize
16.	2024	QUIZ-Techfest	V KIRUBAKARN	III Year / Mech	Erode Sengunthar Engineering College, Perundurai	Participated
17.	2024	TCS ion First Aptitude	K KARTHI	III Year / Mech	Online	Pass
18.	2024	TCS ion Second Aptitude	K KARTHI	III Year / Mech	Online	Pass
19.	2024	Microsoft Excel	K KARTHI	III Year / Mech	Online	Pass
20.	2024	TCS ion First Aptitude	V TAMIZHARASAN	III Year / Mech	Online	Pass
21.	2024	TCS ion Second Aptitude	V TAMIZHARASAN	III Year / Mech	Online	Pass
22.	2024	TCS ion First Aptitude	C NAGA MAHESH KUMAR	III Year / Mech	Online	Pass
23.	2024	TCS ion Second Aptitude	C NAGA MAHESH KUMAR	III Year / Mech	Online	Pass
24.	2024	TCS ion First Aptitude	V KIRUBAKARAN	III Year / Mech	Online	Pass
25.	2024	TCS ion Second Aptitude	V KIRUBAKARAN	III Year / Mech	Online	Pass
26.	2024	Workshop – Data Science and Analytics	S VENKATESH	II Year / Mech	Online	Pass

Placement Records:

S.No	Name of the Student	Batch	Company Placed
1.	Tamilarasan.V	2020-2024	Windcare India Private Limited, Pollachi
2.	Deepak J	2020-2024	Windcare India Private Limited, Pollachi
3.	Alagesh.D	2020-2024	Windcare India Private Limited, Pollachi
4.	Jagadeesh.S	2020-2024	Windcare India Private Limited, Pollachi
5.	Kalimuthu.S	2020-2024	Windcare India Private Limited, Pollachi



Faculty Achievements:

Faculty Participation in the year of 2024

A. Event Organized

Year	Event Type	Title of the Event	Coordinator Name	Date
2024	Workshop	Surface modelling insights for automotive industry	Dr.L.Prabu	12/03/2024

B. Faculty enrichment

Year	Name of the Faculty Member	Event Type	Title of the event	Name of the conducting Organization	Date
2024	Mr.T.R.Arunprasand	FDP	Technological advancement in synthesis of novel materials	Chaitanya bharathi Institute of Technology, Hydera bad	05/08/2024 to 10/08/2024
2024	Mr.T.R.Arunprasand	FDP	Teaching Turbomachinery	KPR Institute of Engineering and Technology, Coimbatore	22/07/2024 to 27/07/2024
2024	Dr.L.Prabu	Workshop	NEP 2020 Orientation & Sensitization Programme	Malaviya Mission Teacher Training Programme of University Grants Commission (UGC) organized by University of Jammu, Jammu, UT of J&K, India	30/05/2024 to 07/06/2024
2024	Dr. N. R. Srinivasan	Workshop	NEP 2020 Orientation & Sensitization Programme	Malaviya Mission Teacher Training Programme of University Grants Commission (UGC) organized by University of Jammu, Jammu.	17/05/2024 to 30/ 05/ 2024



2024	Dr. N. R. Srinivasan	FDP	Fundamentals of Data Science	National Institute of Technical Teachers' Training and Research, Kolkata	24/06/2024 to 28/6/2024
2024	Mr.T.R.Arunprasand	Workshop	Additive Manufacturing and Reverse Engineering	NCAM&IDEMI	05/02/2024 to 09/02/2024

C. NPTEL

Name of the Faculty Member	Month and Year	Name of the Course	Result (Successfully Completed Elite, Elite Silver, Gold)
Dr.L.Prabu	January to April 2024	Biomechanics	Elite + Silver
Mr.R.Boopathi	January to April 2024	IC Engines and Gas Turbines	Successfully Completed
Mr.N.Vasanth Prasath	January to April 2024	Manufacturing Process Technology I & II	Elite
Mr.M.Mohan	January to April 2024	Computer Integrated Manufacturing	Elite
Mr.T.R.Arunprasand	January to April 2024	Computer Integrated Manufacturing	Elite

Faculty Participation in the year of 2023

A. Event Organized

Year	Event Type	Title of the Event	Coordinator Name	Date
2023	Workshop	Amrita virtual lab Workshop	Mr.J.Prem	06/10/2023



2023	Research seminar	Suitability of metal based alloys for automotive components	Dr.L.Prabu	22/07/2023
2023	Research seminar	Effect of fertilizers in the nutrition and growth of rice	Dr.L.Prabu	24/06/2023
2023	Research seminar	Effective usage of communication for engineers	Dr.L.Prabu	20/05/2023
2023	Research seminar	A novel transfer learning with organic computing in deep learning for stress classification	Dr.L.Prabu	08/04/2023
2023	Workshop	Drone technology workshop	Mr.M.Mohan	21/04/23
2023	Seminar	Seminar on How to apply and write patent	Dr.L.Prabu	18/04/23
2023	Research seminar	Multi-objective optimization techniques for research	Dr.L.Prabu	01/04/2023
2023	Value added course	Product design and development using solidworks	Dr.L.Prabu	01/04/23
2023	Workshop	Design thinking Workshop	Mr.R.Boopathi	31/03/23
2023	Value added course	Product design and development using solidworks	Dr.L.Prabu	25/03/23
2023	Research seminar	Research in Biomedical Engineering-An overview	Dr.L.Prabu	11/02/2023
2023	Research seminar	Nanomaterials-Synthesis & Characterization-An overview	Dr.L.Prabu	07/01/2023

B. Faculty enrichment



Year	Name of the Faculty Member	Event Type	Title of the event	Name of the conducting Organization	Date
2023	Mr.T.R.Arunprasand	FDP	Composite Additive Manufacturing	NIT Tiruchirapalli	18/12/2023 to 22/12/2023
2023	Dr.L.Prabu	Conference	Advances in automobile, manufacturing and mechanical engineering”	SRM Easwari Engineering College	28/04/2023
2023	Mr.R.Boopathi	Conference	Engineering applications of alternate fuels, sustainable energy and bio-materials	Annamalai University	10/03/2023
2023	Mr.M.Mohan	Conference	Advances in automobile, manufacturing and mechanical engineering”	SRM Easwari Engineering College	28/04/2023
2023	Mr.R.Boopathi	Conference	Advances in automobile, manufacturing and mechanical engineering”	SRM Easwari Engineering College	28/04/2023

C. NPTEL

Name of the Faculty Member	Month and Year	Name of the Course	Result (Successfully Completed Elite, Elite Silver, Gold)
Dr.L.Prabu	July to Dec 2023	Biomechanics of joints and orthopaedic implants	Elite
R.Boopathi	Aug 2023 to Nov 2023	Applied Thermodynamics	Elite
N.Vasanth Prasath	Aug 2023 to Nov 2023	Automation In Manufacturing	Elite

D. Awards Received



Name of the Faculty Member	Name of Award	Awarding Organization	Year
Dr.L.Prabu	Best Ideation of the Year (Retrofit E-Bike)	SSEI	2023

Faculty Research Activities:

Raja Selvaraj, Sanjana Jogi, Gokulakrishnan Murugesan, NR Srinivasan, Louella Concepta Goveas, Thivaharan Varadavenkatesan, Adithya Samanth, Ramesh Vinayagam, Mohammed Ali Alshehri, Arivalagan Pugazhendhi, “**Machine learning and statistical physics modeling of tetracycline adsorption using activated carbon derived from Cynometra ramiflora fruit biomass**” , Environmental Research, Volume252. 118816, July 2024. **Impact Factor: 7.7**

MOU signed:

S.No.	Name of the institution / industry/ corporate house	Year of signing	Scope under MoU
1.	PRD RIGS INDIA PRIVATE LIMITED, TIRUCHENGODE	2023-2024	1. Consultancy activities 2. Faculty Training 3. Student Training Internship 4. In-plant Training 5. Industrial Visits

Professional society Activities:



S.No	Name of the Professional Society	No. of Faculty Registered	No. of Students Registered	Total
1	Society of Automotive Engineers (SAE)	4	40	44

LIST OF PROFESSIONAL SOCIETY EVENTS CONDUCTED (2023-2024)

S.No	Name of the Society	Name of the Event	Name of the Guest with Designation and Address	Date	No. of Students Benefited
1	SAE	Seminar on “Advancement in Farm Machinery”	Er.M.Krishnamurthi Assistant General manager John Deer Tractors Karnataka	14.02.2024	67
2	SAE	Industrial Lecture on “Design of EV Based Farm Equipments	Dr.E.Ravi Senior Design Engineer Bull Agro, Coimbatore	06.12.2023	98
3	SAE	Farm machinery workshop	Dr.T.Senthilkumar Principal Scientist RS, ICAR-CIAE	09.09.2023	89
4	SAE	Hands on training drone manufacturing	Mr.K.Sathyaselan Manager Aero-Knotes	08.07.2023	95



Thank you for joining us for this edition of our Mechanical Engineering Newsletter! We hope you found the insights and updates informative and inspiring. As we continue to explore the innovations and challenges within our field, we encourage you to stay curious and engaged.

Get Involved: We always welcome contributions from our community. If you have insights, projects, or news to share, please reach out!

Stay Connected: Follow us on our social media channels for real-time updates and discussions. Let's continue to push the boundaries of mechanical engineering together!

Thank you for being a part of our journey. Together, we're shaping the future of engineering. Until next time, keep pushing boundaries and dreaming big!

Education is the movement from darkness to light

If you want to see the light come to



We will with you..