

**Vision Of the Institute**

To deliver holistic technical education of high standards that creates competent technocratic leaders of the future, from diverse backgrounds, who will power India to greater heights, and to combine with a holistic approach for the development of character and skills of students.

**Mission Of the Institute**

To achieve and realize our Vision by

- ✓ Providing a conducive academic environment to our students that promotes creativity, nurtures hidden talents and develops self-confidence
- ✓ Maintaining high level of academic standards by keeping abreast of newer technologies and tools in both teaching and communication
- ✓ Providing quality education to impart basic engineering knowledge commensurate with a diploma level qualification
- ✓ Taking efforts to prepare students to be 'Industry-ready' at the time of leaving our college
- ✓ And to achieve the above without any compromise to our core values of Honesty, Sincerity, Dedication, Trust & Excellence

**Vision Of The Department**

To be a distinguished department that develops industry-ready mechanical engineers, successful entrepreneurs who embody the pride of nation through exceptional skills, quality and innovation.

**Mission Of The Department**

To equip students with advanced technical skills and industry knowledge by improving the curriculum, collaborating with industries, and connecting with alumni.

To foster entrepreneurship and innovation by encouraging interdisciplinary projects and hands-on problem-solving.

To promote ethical practices and excellence to develop professionals who contribute to the Nation's progress and pride.

**Program Educational Objectives (PEOs)**

**PEO1:** Build a solid foundation in mechanical engineering principles and practical skills to effectively apply theoretical knowledge to real-world challenges.

**PEO2:** Prepare successful careers in industry, entrepreneurship and higher education with adaptability and problem-solving expertise.

**PEO3:** Uphold ethical values, foster innovation and demonstrate social responsibility to contribute positively to society and the environment.

**Program Specific Outcomes (PSOs)**

**PSO1:** Apply core mechanical engineering knowledge and advanced skills in design, analysis, simulation, and manufacturing to develop innovative, efficient and sustainable solutions for real-world challenges.

**PSO2:** Cultivate an entrepreneurial mindset, uphold ethical standards, and leverage innovative skills to drive technological advancement and support the nation's growth.

**Program Outcomes (POs)**

**PO1-Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

**PO2-Problem analysis:** Identify and analyse well-defined engineering problems using codified standard methods.

**PO3- Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

**PO4-Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

**PO5- Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.

**PO6- Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

**PO7- Life-long learning:** Ability to analyse individual needs and engage in updating in the context of technological changes.

**INDUSTRIAL VISIT**

An industrial visit to a Thermal Power Plant was organized for the Third Year Mechanical Engineering students with the objective of providing practical exposure to power generation processes and industrial working environments. The visit was conducted in two phases: **A Section students visited on 19th July 2024**, followed by **B Section students on 26th July 2024**.



**WORKSHOP & PROJECT COMPETITIONS**

The Department of Mechanical Engineering at Sankar Polytechnic College promotes experiential learning through active student participation in technical events.

During 2024–2025, Mechanical students participated in:

- ISTE Annual Polytechnic Students Convention 2025
- ATOM XNERGI 2K24 – State-Level Technical Seminar
- Paper Presentation & Poster Making Competitions
- National & Inter-Institutional Workshops

Students presented innovative projects, research papers, and posters on emerging technologies such as **Smart Cities, Sustainable Engineering, Automobile Safety Systems, and Energy Technologies**. The department also achieved **prize-winning performance** in poster making competitions.

The **Indian Society for Technical Education (ISTE), Tamil Nadu Section**, organized the **Annual Polytechnic Students Convention 2025** on the theme “*Shaping the Future of Technical Education: Innovations, Sustainability and Technology*” at **Arasan Ganesan Polytechnic College, Sivakasi**. **K. Selva Vigneshwaran** and **M. Sheik Mohammed**, students of the **Mechanical Engineering Department, Sankar Polytechnic College, Tirunelveli**, actively participated

in the **Innovative Project Competition** held on **28th February 2025**, showcasing their technical creativity and innovative problem-solving skills.

Sankar Polytechnic College, Tirunelveli, successfully organized the state-level technical seminar and paper presentation event, **ATOM XNERGI 2k24**, on September 4, 2024. This collaborative initiative between the college's Institution of Engineers' Student Chapter and the Kudankulam Nuclear Power Plant Project (KKNPP) showcased the technical prowess of engineering students.



Name of the Student	Year of Study	Event Name	Organized by	Duration
U.vimal karthikeyan	III	ATOM XNERGI 2K24	IE(I) Students' Chapter Sankar Polytechnic College.& KKNPP	04.09.2024
M.theena merwin				
S.surya				
M.sheik mohammed				
K.selva vigneshwaran				
I.muthu sudar				
N.ramesh				
N.sudalai muthu				



**FOUNDER'S DAY CELEBRATION PAPER PRESENTATION COMPETITION**

S.No	Student Name	Activity	Date
1	M.N.Hidayathur Rahman	Paper Presentation	05.02.2025
2	A.Mathesh Babu		

**SEMINAR PARTICIPATION**

S. No	Student Name	Event Name	Activity	Date	Organizing Institute
1	M.Siva Subramanian	Workshop On "Research And Consultancy Through Innovation And Incubation"	Workshop	19.09.2024	Psn Institute Of Technology And Science, Tirunelveli
2	C.Varun Raj				
3	M.Sheik Mohammed				
4	K.Selva Vigneshwaran				
5	Arunparthiban M	Non Destructive Testing		02.12.2024	Imaya Inspection Technology, Tirunelveli

**Memorandum of Understanding (MOU)**

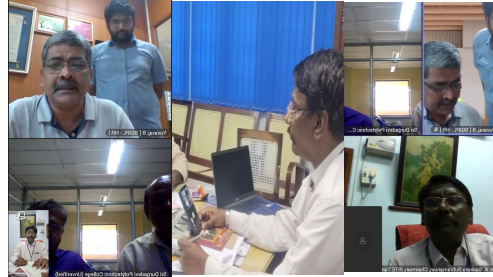
**SIGNED MoU WITH DELPHI-TVS on 23.10.2024**



**SIGNED MoU WITH M/S. GLASS ACADEMY, CHENNAI on 26.07.2024**



**SIGNED MoU WITH SAINT-GOBAIN, CHENNAI on 02.12.2024**



**SIGNED MoU WITH INDIAN WELDING SOCIETY, NEWDELHI on 24.02.2025**



**Mr. S. Chellappa, Head of the Mechanical Engineering Department, Sankar Polytechnic College, receiving the Best Teacher Award from ISTE (Indian Society for Technical Education) on 09.05.2025 for his exemplary service in technical education.**

**NCC /NSS ACTIVITIES**



**ENROLMENT OF CADETS FOR 1 YEAR**

**CELEBRATING 78TH INDEPENDENCE DAY**



**PLASTIC AWARENESS PROGRAMME**



**CELEBRATING 76TH REPUBLIC DAY**

**BLOOD DONATION CAMP**



**WORLD BICYCLE DAY**

**WORLD ENVIRONMENT DAY**



**INTERNATIONAL YOGA DAY**

**DRUG ABUSE RALLY**



**NASHA MUKT BHARAT ABHIYAAN**

**DEWORMING TABLETS DISTRIBUTION**



**SOCIAL JUSTICE DAY**

**CAMPUS CLEANING AND PLASTIC COLLECTION**



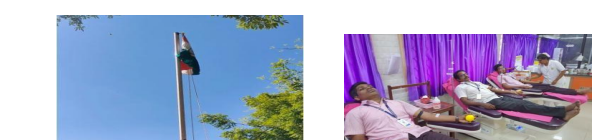
**CLEAN INDIA MISSION**

**ROAD SAFETY AWARENESS**



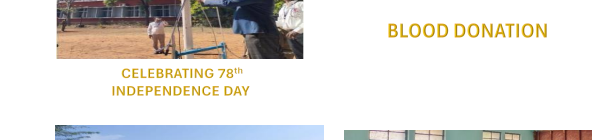
**ROAD TRAFFIC VICTIMS' REMEMBRANCE DAY**

**NATIONAL YOUTH FESTIVAL**



**CELEBRATING 78th INDEPENDENCE DAY**

**BLOOD DONATION**



**CELEBRATING 78th INDEPENDENCE DAY**

**BLOOD DONATION**

**EXTRACURRICULAR ACTIVITY & EVENTS**

A six-day Science and Technology Capacity Building Programme, sponsored by the Tamil Nadu State Council for Science and Technology (TNSCST), was successfully conducted at Sankar Polytechnic College with the objective of strengthening industry-oriented skills among polytechnic students.



**INAGURATED CENTRE OF EXCELLENCE- FUEL INJECTION TECHNOLOGY LAB**



**AWARENESS PROGRAMME On MSME**

An Awareness Programme on MSME (Micro, Small, and Medium Enterprises) Schemes was conducted at Sankar Polytechnic College, organized by the Entrepreneurship Development and Innovation Institute (EDII). The event aimed to enlighten students and faculty members about the various opportunities and government schemes available for aspiring entrepreneurs and innovators in the MSME sector.



**ACHIEVEMENTS**

**ISTE Best Student Award**



The Indian Society for Technical Education (ISTE), Tamil Nadu Section, conferred the prestigious ISTE Best Student Award – 2024 on 28.02.2025 for Selva Vigneshwaran K, III Year Mechanical Engineering, Sankar Polytechnic College, Sankar Nagar, in recognition of his overall excellence in academics, extra-curricular activities and active involvement in ISTE Chapter activities.

**Best Teacher Award**



**TOPPERS**

s.no	Student name	Year	Rank
1	K.Selva Vigneshwaran	III	FIRST
2	M.Chinna Durai	II	FIRST
3	M.N.Hidayathur Rahman	I	FIRST

**IN PLANT TRAINING**

S.NO	STUDENT NAME	YEAR / SEC	COMPANY NAME
1	K.Selva Vigneshwaran	II / MECH- "A"	THERMAL POWER PLANT - TUTICORIN
2	M.Siva Balan		
3	K.Selva Vigneshwaran	II / MECH- "A"	TAMILNADU STATE TRANSPORT CORPORATION , TIRUNELVELI
4	M.Sheik Mohammed		
5	M.Siva Balan		
6	M.Aswin		
7	V.Bharath		
8	M.Mohammed Thonis		
9	P.Meenachi Sundaram		
10	Muthu Kumar Nataraj		
11	T.Ajish Varsha		
12	A.Arun Kumar		
13	D.Boopathy		
14	K.Selva Vigneshwaran	II / MECH- "A"	SRI KRISHNA TVS ,TIRUNELVELI
15	M.Sheik Mohammed		
16	M.Siva Balan		
17	A.Arun Kumar	II / MECH- "A"	DHARANGADHARA CHEMICAL WORKS LTD, TUTICORIN
18	K.Selva Vigneshwaran		
19	M.Siva Balan	II / MECH- "A"	ISRO PROPULSION COMPLEX (IPRC), MAHENDRAGIRI.
20	K.Selva Vigneshwaran		
21	A.Arun Kumar		

**PLACEMENT SUMMARY (2024-2025)**

Sl. No	Name of the Employer	Number of Students Placed	Salary Package
1	TVS Motor Company Ltd	4	3.8 LPA
2	Ashok Leyland Limited	4	4.5 LPA
3	KYB Motorcycle India Pvt. Ltd	18	2.28 LPA
4	Wheels India Ltd	5	2.316 LPA
5	Delphi TVS Technologies Ltd	6	1.92 LPA
6	HL Mando Anand India Ltd	1	2.22 LPA
7	IP Rings Ltd	23	2.22 LPA

**SPORTS ACTIVITIES**

IPAA-Divisional Level Carrom Tournament- Winner

IPAA-State Level Carrom Tournament- Runner-up

IPAA-Divisional Level Table Tennis Tournament Runner-up

IPAA-Divisional Level Chess Tournament-Third

CM Trophy Carrom Tournaments - First Prize

Open Cricket Tournaments - Runner-up

**Editorial Board**

**Chief Editor :**

**Mr. S.Chellappa, HOD/MECH**

**Faculty Editors :**

1. Mr. S.Selvaraj, Lect/MECH
2. Dr. M. Ponrajan Vikram, Lect/MECH
3. Mr. S. Rajeswaran, Lect/MECH

**Student Editors :**

1. Sivaram. P, II Year Mech-A
2. Mohadeeswaran, II Year Mech-B

**THE IMAGINATION SHELF**

மன்தா நீ யார் ?

நீரில் உதித்து நீரில் கரையும்  
மன்தா நீ யார் ?  
அன்பில் தொடங்கி அழகையில் முடியும்  
மன்தா நீ யார் ?  
தன்னலம் வீடுக்கு மன்தா நீ பொருநலம் பேணு ...

M. Aswin, III A

நீ நம்பினால்

உழைப்பு தான் மன்தனை உயர்த்தும் படிக்கட்டு,  
விழுந்தாலும் எழுந்தால் தான் வெற்றி தொடரு,  
பயம் வந்தாலும் நம்பிக்கை விடாதே மனமே,  
கின்றைய முயற்சி நாளைய பெருமையே,  
கனவுகள் சமையாக அல்ல,  
கிலக்காக மாறட்டும்,  
நீ நம்பினால் - உலகமே உன் வழி மாறட்டும்!

A. Arun Kumar, III A

பக் பக்

கிதயத்தில் ஒரு டக் டக்  
மனதில் ஒரு பக் பக்  
நாடியில் ஒரு டக் டக்  
நனைவில் ஒரு திக் திக்  
தேர்வு அறைக்குள் நுழையும் போது

P. Immanuel, II A

**ARTICLE**

**The Future of Additive Manufacturing**

Multi-material printing is also gaining importance, allowing a single product to combine different properties such as strength, flexibility, and conductivity.

**Impact on Manufacturing and Industry**

Additive manufacturing is changing traditional manufacturing models. Instead of mass production, companies can now focus on mass customization, producing parts tailored to individual needs. On-demand manufacturing reduces inventory costs and supply chain dependence. Distributed manufacturing, where products are printed closer to the point of use, can significantly lower transportation costs and delivery times.

**Technological Advancements**

One of the most significant developments in additive manufacturing is the improvement in printing speed, accuracy, and reliability. Modern 3D printers are capable of producing highly complex geometries with minimal human intervention. The integration of artificial intelligence and machine learning is further enhancing the process by optimizing designs, predicting failures, and improving quality control. These advancements are helping additive manufacturing move closer to large-scale industrial production.

**Role in Healthcare**

Healthcare is one of the most promising areas for additive manufacturing. Customized medical implants, dental devices, and prosthetics are already improving patient outcomes. In the future, bioprinting may allow the creation of tissues and organs for transplantation. Additionally, 3D-printed anatomical models are becoming valuable tools for surgical planning and medical education.

**Conclusion**

The future of additive manufacturing is bright and full of possibilities. As technology matures, it will continue to revolutionize industries by enabling innovation, customization, and sustainability. From healthcare to space exploration, additive manufacturing is set to become a cornerstone of modern manufacturing and a key driver of technological progress.

**Development of New Materials**

The future of additive manufacturing is closely linked to material innovation. Beyond traditional plastics, researchers are developing advanced metals, high-performance polymers, ceramics, and composite materials. In healthcare, biocompatible materials are enabling the production of customized implants and prosthetics.

M. Siva Balan, III A

