SRI MUTHUKUMARAN INSTITUTE OF TECHNOLOGY



Annual Report

Academic Year 2023-24

This annual report is a humble attempt to encapsulate our outstanding achievements in the academic year **2023-24**. Sri Muthukumaran Institute of technology (SMIT) was established by Sri Muthukumaran Educational trust in the year 1996, it was declared as a Telugu linguistic minority institution by the order of the government of Tamil Nadu, it is affiliated to Anna University, and accredited by NAAC.

The SMIT has a sprawling campus spread over 4.6 acres at Chikkarayapuram, near Mangadu. The excellent infrastructure includes separate blocks for each department with well equipped laboratories, spacious class rooms, a central library with more than 49,448 volumes, 228 journals, e journals and access to e-resources is made available with the support of 300 Mbps BW, fibre network interconnectivity from BSNL teleservices with WI-FI facility which provides a wonderful ambience for the students to learn. SMIT has well qualified and experienced faculty members, and very well trained technicians. It has got residential hostels separately for both boys and girls.

As per the resolution passed in Governing Council Meeting, the Institute has undertaken several measures to include ICT facilities in teaching learning process. Around 82% of class rooms and seminar halls are now equipped with ICT facilities which includes Webinar, MOOCS, NPTEL in the routine time table for curriculum delivery. Our faculty has published their research work in reputed National / International Journals and National / International Conferences conducted in the Year 2023 -2024. The Institute has signed MoUs with reputed Universities, Industries and Corporate houses for the purposes such as faculty exchange, student exchange & field trip, On the job training and Placement opportunities as per the resolution passed in Governing Council.

There are research scholars registered for part time Ph. D under Anna University . At this junction it is brought to the notice that all academic programs in Sri Muthukumaran Institute of Technology are conducted incorporating self-regulatory responsibilities aimed at improving

quality and achieving academic excellence combined with participatory approach in all the academic activities under the egis of IQAC which is functional at the College since the year 2011. The Institution ensures, effective, decentralization and participative management through the functionalities of various clubs and committees. There is a speedy grievance redressal mechanism, anti-sexual harassment and several gender equity programs as part of cohesive and peaceful academic ambience. With a view to bridge the gap between theory and practical learning, several co-curricular activities in the state- of -the art relevant techniques with thrust on relevant areas of specialization, is blended with academic program.

The Department of **Civil Engineering** had organized a workshop in 3D Studio Max and conducted an awareness program on Traffic rules. Department had arranged various internship programs for students. Students attended internship programs offered by the companies SR Foundation, Ponni Constructions and SK Housing and Architect. The various activities organized by the department club were given below

- PPT Presentation on Pollution Preventive Measures
- IQ test and Tongue Twister Challenge
- Bridge-O-Mania

Students attended an Entrepreneurship Development Programme at Anna University, Guindy Campus. Students visited Larsen and Toubro Ltd. (CMRL Construction works) and Central Institute of Petrochemicals Technology, Guindy as a part of industrial visit. Students of Civil department has displayed their models and projects in the Project Expo' 23 conducted in the Institute. Four students of the department did Surveying on Road Safety Traffic Field Survey in Porur Location.

Dr.S.Manikandan of civil department Awarded Ph.D.degree in Civil Engineering by Annamalai University on 20th October '23. Four faculties published Journal papers in International Conference on Green Energy, Environmental Engineering and Sustainable Technologies, Novyi Mir Research Journal , Journal of Emerging Technologies and Innovative Research, International Journal of Future Generation Communication and Networking , 5th International Conference on Sustainable Environment and Civil Engineering , Indian Journal of Science and Technology. Faculties attended online FDP's at NITTTR, Chandigarh, Velammal College of Engineering and Technology, Mangalam College of Engineering Dr.M.G.R Educational and Research Institute, Chennai, KLS VDIT, Haliyal.". Faculties Attended Naan Mudhalvan Phase 3 FDP for Concrete Building System Design on 24th to 28th July 2023 conducted by L & T Edu Tech. Faculties Attended Online FDP organized by Scientific Research Reports – AI Tools for Streamlining Academic Research and Paper Writing. Attended 14 days online National level FDP on Feb-1 to Feb 14 2024 organized by Sairam Engineering College, Chennai- "Innovative Teaching strategies and tools in the digital age". Attended 7 days National level Online FDP on 20th April to 27th April 2024- 'Outcome Based Education and application of Generative AI in Teaching and Research" Organized by IQAC of Gauhati University. Faculties of civil department attended various webinars and conducted different workshops for students. Faculties attended various NPTEL courses offered by IIT Chennai.

The **Department of Computer Science and Engineering** inaugurated the CODENEXUS Club in 2023. Department of Artificial Intelligence and Data Science inaugurated, the ARTIFIX Club in the same academic year. The Department has conducted a Club Coding Activity on various Programming Languages like C, C++, Java and Python. The Department organized a Workshop on Online Bus Ticket Booking - Coding Using Python on 04th August, 2023 for Computer Science Engineering, Electronics and Communication Engineering & Artificial Intelligence and Data Science Engineering Students Presented by, Ms. Anandhi, Tech Lead, Livewire, Chennai. The Department organized a Seminar on Artificial Neural Networks in Data Science Presented by, Mr. S. Arun Kumar, Sr. Business Research Scientist @ AMAZON, Inventor and Founder, Cogxta Technologies Private Limited. The Department organized an Industrial Visit for CSE & AI-DS Students at Tek Meadows, Chennai. Memorandum of Understanding Between PYROFERUS TECHNOLOGIES, Department of Computer Science and Engineering & Department of Artificial Intelligence and Data Science in 2023. E-sports activity for collecting data conducted by the artifix club – AI&DS.

The Students Participated in Project Expo 2023. Third year CSE students & AI &DS participated in international tamil computing conference(kanitamil24) held at chennai trade centre nandambakkam organized by tamil nadu government. Around 70 CSE & AI&DS students participated workshop and received certificate on "Data Anaytics with knime" At NSIC technical centre. Two students of CSE and AIDS department have completed the course "Systems and Usable Security" Organized by NPTEL on FEB 2024.FINAL year CSE & AI-DS students published paper in the reputed International Journals and Conferences. Final Year CSE students Team was selected to show case their project developed in the Tamilnadu at Nehru Stadium, Mudhalvan Project Expo Conducted by the Government of Tamilnadu at Nehru Stadium,

Chennai on the Topic of Full Stack Development-Chattify. All the Students of CSE and AIDS attended both Summer and Winter Internship during the exam holidays.

CSE faculties have participated in the FDP on "Rapid IOT prototyping using single board computers" Organized by simats engneering college. Two faculties OF CSE Department, have participated two days FDP & Workshop – e-yantra conducted by Shri Adhiparasakthi Engineering College, Melmaruvathur & IIT Bombay

Department of Electronics and Communication Engineering had been conducted various activities like internships, Workshops, Industrial visit, technical quiz, Project Expo, Seminar etc, A total of 5 internships arranged by the department. Students attended Internship in "Artificial Intelligence composition exploring creative possibilities", Frontend Internship including Project in companies like Marcelo, Empower Guiding center and RETECH Solutions Pvt.Ltd on the topic "Embedded System" and IoT and Embedded Systems. Third year students of ECE department attended internship provided by NSIC Technical service Centre on the topic" IoT and Embedded Systems"

Workshops and Technical Events were organized to make students aware on various hardware services such as

- Technical Event on "Embedded Systems & IoT
- One day Workshop on "Online bus ticket booking coding using Python"
- One day workshop on VLSI using CADENCE EDA tools Data Analytics with Knime

Students of ECE Department visited HTL, Guindy as a part of Industrial Visit. Technical quizzes and Project expos were arranged by the department in order to encourage student's talents. ECE department inaugurated Embedded Systems & IoT Tech club on 04.08. 2023.Tech club has arranged programs on Circuit Debugging, Online Poster Design and IoT & Robotics and awarded prizes for the winners. Students have actively participated in the seminars organized in the department on the topics "Importance of Higher Studies in Abroad". Livewire, Porur conducted a one-day Workshop/ Hands on training in "Online Bus Ticket Booking Coding Using Python" and J.Tech, Perungudi conducted Seminar on "Recent advancement in flexible antenna" for students.

Students have actively participated in National/ International conference and technical symposiums in various educational institutions. Around 4 Journal papers are published jointly by

the students with faculty. Students presented projects on "Climate change basis Boot camp" at MIT HUb, EDC cell, Chrompet and six students presented their project on "Elderly Assist Smart Home Automation using IoT" at Smart India Hackathon 2023-Nomination.

Faculty have published Journal papers in International Journal for Science and Advance Research in Technology (IJSART). Mrs.Mahalakshmi attended 6 days FDP in TL & RF Microwave at MIT Chrompet. Three faculties attended ATAL FDP in Semiconductor Device Design from RTL to GDS-II at Vel Tech University. Six faculties of ECE department have passed Swayam NPTEL exam on the subjects "Digital system Design" and "Communication Networks". Three faculties attended webinars on the topics "Journeying Beyond Chip War: Unleash the Art of Chip Design, and Literature Review Writing for Research Scholars organized by Maven Silicon and Research Graduate Academy. Three faculties achieved 100% result in Anna university examination.

Department of Electrical and Electronics Engineering has been arranged Three industrial visit for students. The companies are HTL Ltd, North Chennai Thermal Power station and Adventure Technology Solutions Pvt. Ltd. At the beginning of the academic year Tech club TESLA was inaugurated by Principal Dr. K. Somasundaram. Technical club of the department 'TESLA' arranged various activities for students. Activities conducted by Tesla Tech club were given below

- Conducted Graduate Aptitude test for all departments
- IDCE-2023 (Intra Department Crossword Expedition) conducted for all departments
- Hands-on Training program on Embedded IoT Product Development
- Fruits and Vegetable Carving Competition conducted for all departments
- Alumni Talk on Carrer Development Program

Association of Electrical and Electronics Engineering had been arranged Seminar on IoT & Embedded System and Seminar on interview skills. Association of EEE department also arranged a workshop on "Overview of Electrical Systems in Large Industry".Two students successfully completed internship at KNR Engineers (India) Pvt Ltd. ,Chennai with a stipend of Rs 10,000.

Dr.K.Prema Kandasamy of EEE department has completed Ph.D on 06.05.2024 Two faculties were completed their Ph.D course work. Dr. V.Anitha published paper in ELSEVIER 2023 and faculties published their papers in REST Publisher, ICACRS – 2^{nd} international Conference 2023 and IEEE – 2^{nd} international Conference 2023. Dr V. Anitha submitted project tiled "A Smart Wireless Power Transfer System for Electric Vehicles in Highway Lane".

One faculty Successfully completed 12 weeks NPTEL online course in "Introduction to C programming". Faculties of the department attended various FDP'S conducted by different colleges. Mrs.P. Vanitha,HOD/ EEE attended two days FDP titled" Smart Electric Vehicle Design" conducted by Anna University. Faculties attended Online FDP on Sustainable Development Goals: Challenges and Opportunities, Online FDP on Smart Grid and Integration of Distributed Generation conducted by NITTTR, Chandigarh, Online FDP on "The Emerging Trends in Research and Teaching Technology" conducted by St. Thomas College of Arts and Science. conducted by NITTTR, Chandigarh. Integration of automotive and smart mechatronics system for sustainable mobility conducted by KCG College of Technology. Online Workshop on CHAT GPT & AI Tool Box conducted by LMS Solution Research Support, Chennai. NPTEL Awareness E-Workshop conducted by NPTEL Team.

The **Department of Mechanical/Mechatronics/ Robotics** conducted various seminars and workshops. A Workshop was conducted in 3D printing and additive manufacturing. Students from the Mechanical, Mechatronics, and Robotics departments participated and gained valuable knowledge. The department also signed a memorandum of understanding with companies such as Design Cad Technologies, Prag Robotics, and VM Tech Solutions etc. These collaborations allowed students to experience knowledge-based learning through various activities.Final year students from the Robotics and Automation department presented innovative projects in the Project expo 23. Through the Naan Madhavan scheme, students gained knowledge from various companies like Micromatics DMW/CNC FANUC Turning Centre.

In addition to academic activities, students also participated in sports like football, handball, volleyball, and cricket. The cricket team won the winner's prize at a tournament held at Sri Venkateswara College of Engineering in March 2024.Students were involved in various events through clubs like the Fusion Club, Azimov Club, and Tech Titans. Yoga classes were also conducted, and many students participated. Faculty participated in NPTEL related courses and successfully cleared them.

Department of **Information Technology** has submitted three Projects for funding with TNSCST. Field trip has been arranged for the students to BSNL, Guvi Network Private Ltd, Ashok Leyland, Chennai. IT Association Techno Tuners Club was inaugurated on 26th August 2023 by the SMIT Alumni Mr. S. Gurusharan, Principal Software Engineeer, Athena Health

Technology Pvt Ltd, Chennai. Livewire for Live Careers, Chennai conducted one day workshop on Online Bus Ticket Booking Coding using Python.12 Students underwent internship in Ajantha Technologies, Tech Solution System, Shiash Info Solutions Private Limited, Chennai. IT students have participated in cultural and sports events in various educational institutions.

Faculties attended Faculty Development Programme in NCE Academy and TamilNadu Skill Development Corporation Organised by Anna University, Faculty Development Programme in Internet of Things (IOT) at Anna University, Chennai and Faculty Development Programme in Ingage Technologies and EDUNET Technologies associated with TamilNadu Skill Development Corporation. Mrs. K. Shanthi Ponraj attended FDP in NSE academy associated with Tamilnadu skill development Corporation organized by Anna university and also registered Ph.D in Anna University July 2023 Session. Mr.S Senthil Kumar,AP/IT attended IEEE conference in Hindustan Institute of Technology and Science and also pursuing ph.D at Sathyabhama Institute of Science and Technology,Chennai.Mrs. S. Dhanalakshmi, HOD/IT attended IIC regional meet on 01.12.2023 at B.S. Abdur Rahman Cresent Institute of Science and Technology, Vandalur, Chennai.

Students of **Bio Medical Engineering department** were participated in the event **MAFIARADE** as a part of Biomutantz held at Chennai Institute of Technology. A student participated in the event PINNACLE PAPER as a part of Biomutantz held at Chennai Institute of Technology. Students were Participated in the event **Techive** as a part of Biomutantz held at Chennai Institute of Technology. Students were Participated in the event **Techive** as a part of Biomutantz held at Chennai Institute of Technology. Students were Participated In **MEDINNO- 2K24** the national level technical symposium at Kings Engineering College, Chennai. Students presented papers in SPECTRON'24 and participated in the event TACKLE&CO at Crescent institute of science and technology on 27.03.2024. Second year student won second prize for poster design competition as a part of Embedded system & IoT club at Sri Muthukumaran Institute of technology on 08.11.2023. Second year BME students Attended one day national conference organized by Entomology Research institute, Loyola college on 23.01.2024.

Mrs. Keerthi Vembu has Participated 7 Days of International FDP Program On "Practical Aspects of ICT Tools & Online Teaching in Current Sceneario" Organized by RFI (Research Foundation of India) From 16 to 24 April 2024.

The Department of Pharmaceutical Technology organized two industrial visits at Sai Mirra Innopharm Pvt. Ltd, SIDCO Industrial Estate, Ambattur, Chennai and Deepam Hospital.

Department conducted a seminar on GATE 2024 Awareness Program. The Dose Designator Club of the department conducted an activity "Cooking without Fire". Students completed their internships at NTK Pharma Pvt.Ltd, Chennai and Axon Drugs Pvt, Ltd, Chennai.Students presented their project at **Project Expo'23** at SMIT on the topics "Pharmacokinetics - ADME Mechanism" and "Types of Dosage Forms".Three faculties of the department pursuing PHD and their course work were completed. One faculty published Journals in Oxidation Communications, Biological Forum-An International Journal and Frontiers in Life Sciences: Present Developments and Future Directions. Faculty of the department submitted project at TNSCST on the topic "Surface Functionalized Drug Loaded Zn-Oxide Nanospheres in the Applications of Bionanomedicine". One faculty attended FDP on "Employability Skills"- Ethnus Naan Mudhalvan organized by CEG Campus, Anna University. One faculty attended FDP on Online FDP on "PharmaPinnacle: Elevating faculty Expertise in Pharmaceutical Scienes" organized by Vishwakarma University, Pune .Faculties participated in Inter-college sports held at VIT Chennai.

Department of **Science and Humanities** organised an industrial visit on October 30, 2023, to CRPF, located in Avadi. The department of science and humanities inaugurated the Fine Arts Club on October 6, 2023. The Fine Arts Club conducted an elocution for Youth Awakening Day on October 16, 2023. The Fine Arts Club conducted a Mehendi competition on December 15, 2023. The department is very glad to inform you that for the past three years, the Heart fulless foundation in Chennai has organised a three-day meditation programme for first-year students, and we are grateful that they have signed an MOU in our college.

Department is pride to announce to you all that Deepika V (I Year), a CSE student, has won the first prize in Silambam at Arignar Anna Mandapam in Kundrathur. It is proud to announce that, the I-year toppers list in 2023-2024 university result.One student achieved CGPA of 8.77 in Anna University Examination. A total of 5 students achieved CGPA more than 8.

It is my pleasure and happiness to announce that Mrs. K. Macha Regai (HoD) from Science and Humanities and Mrs. R. Sheela AmalRaj, Assistant Professor (Maths) together published a book, "Statistics and Numerical Methods." This book is designed for B.E./B.Tech. First-year students to enhance the mathematical concepts easily. Dr. V. Ramesh, Assistant Professor of Science and Humanities (Physics), participated in a FDP programme on "Innovation and Intellectual Property Rights." in NIPF 2023. Mr.M.Vishnuwaran, Assistant Professor of Science and Humanities

(Physics), participated in a national webinar entitled "Exoplantes: Distinct Worlds from the Solar System" at Karunya Institute of Technology and Science. Mrs. Nathiya R., Assistant Professor of Science and Humanities (Maths), successfully completed the NPTEL online course with a gold medal. Mrs.Ramya, AP, English, has produced a 100% result for the odd semester (2023-2024).

Department of MBA organized industrial visit to Modern Bakers Pvt,Ltd, Madhavaram,Chennai. Ist & IInd Year students were participated in the event FEST-ETHOZ "23" held at Sri Ramachandra Faculty of Management Science, Chennai. First year students participated in the event Quantum Quasar 2k23" held at S.A. College Arts & Science, Chennai. Students won first and second prizes in April/May 2023 examination. Students got First, Second and third prizes on Book Review- 20th October 2023. Students won first and second prize in the event "Best out of Waste" on 17th November 2023. Department faculties attended National Conference titled" Recent Trends in computer Applications Business Intelligence "on 6th October 2023. Dr.S.Chitra Devi published a book titled "E-Business Management". She also published Handbook on "Relationship between organizational effectiveness, climates and its predictors among IT Sector". Faculties attended 5 days FDP program on "Research Methodology" held at Sri Kanyaka Parameswari Arts & Science College for Women. Faculties attended 5 days FDP in "Strategic Development Programme on Digital Transformation in Business World- A Well Worn Path for Driving and Scaling Digital Initiatives" held at S A College of Arts & Science. Faculties attended 1 week FDP on "Research Methodology" organized by Dr.M.G.R.Educational and Research Institute. Faculties attended 5 days FDP on "Outcome Based Education (Use of AI Tools in Teaching and Learning)" organized by Dr.M.G.R. Educational and Research Institute.

Department of MCA Inaugurated "Humanoid Intelligence Club" on 15th September 2023 by Mr. C. Karthikeyan co-founder of BU SOFT TECH, Chennai. Department of MCA and Humanoid Intelligence Club jointly conducted a special seminar Program for PG students on 29th September 2023, titled "Five T'S of TOASTMASTERS by Mr. V. Sriram Manager DXC Technologies, Chennai and Mrs. S. Sathya Agila SSN college of Engineering. Department of MCA along with Humanoid intelligence club conducted National conference on "Recent Trends In Computer application"s –NCRTCA'23 on 6th October 2023."Networking is the backbone of the digital age, connecting people, devices, and ideas across the globe." In order to encourage Students of IInd and Ist year in Networking concepts nearly 120 students visited "NETWORK GEEK", Company in Vadapalani on separate days. Department of MCA conducted Inter department event "TECHQUIZ'24 at SMIT. Nearly 30 teams participated in the event and they conducted aptitude, technical and visual rounds to select the winners. MCA Celebrated world book day on 23rd April 2023 aimed at promoting the importance of reading, publishing, and copyright. A book fair was set up on campus featuring a diverse selection of books across various genres. Students and faculty had the opportunity to browse and purchase books at discounted prices, thereby encouraging them to build their personal libraries. Book related technical quiz and evaluation of book presentation were conducted by MCA Students. Weekly seminar hour has been allotted for both I and II MCA students as knowledge sharing hour the motto of this program is to improve communication and presentation skills, to reduce anxiety of stage fear, to share recent technologies in IT and to get knowledge in various fields. Second year MCA student V.Parthiban won two gold medals in district kickboxing , two gold medals in state championship,3 silver medals in National championship and also participated in Wako International Kickboxing, Maharashtra.

78% of students of batch 2019-23 passed with First class with higher grades and placed in reputed companies. Few students are pursuing higher studies.

With reference to Placements, this year we have on-campus interviews and off campus interview opportunities to our students with average salary of Rs 2.5 to 3 lakh per annum. 80% of the eligible students got placed and offer letters are provided. We are planning to conduct more off campus interviews in this Academic Year. I am very glad to inform that many more opportunities will be given to this batch of students in the months to come. I request the students to make good use of these recruitment drives.

S.No	Company Name	S.No	Company Name
1.	CMS IT Services	31	Dunamis Machines
			International Pvt Ltd
2.	Hakuna Matata	32	Super Auto Forge
3.	Global Soft Solutions	33	Neolync Telecommunication Pvt
4.	KRG Technologies	34	Foxconn Hon Hai Technology
5.	Softsolutions4U	35	e-con Systems India Private limited

Some of the Industries where our students got selected are:

6.	Qmax Systems	36	India Japan Lighting Pvt. Ltd.
7.	KAAR Technologies	37	Just Dial Limited
8.	Surya Informatics	38	J & F (India) Private
9.	Path Front Technologies	39	Chemleon Diagnostics Pvt Ltd
10.	Ameex Technologies		
11.	4D Technologies		
12.	NVH India Pvt Ltd		
13.	Vortex Engineering		
14.	Sutherland Global		
15.	Paragon Digital Services		
16.	Amazon		
17.	Infosys		
18.	Tringapps		
19.	Valued Epistemics		
20.	Sri Ram Transports		
21.	Qspiders		
22.	Waycool Products		
23.	TCS		
24.	FACE		
25.	Kotak Ltd		
26.	Teach For India		
27.	CRISIL		
28.	HCL		
29.	Aagna Global		
30.	Healthwatch Telediagnostics Pvt. Ltd		