## 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, affiliated to Anna University and accredited by NAAC.

The SMIT has a sprawling campus spread over 9.6 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, fibre network interconnectivity from BSNL with WI-FI facility, which provides a wonderful ambience for the students to learn. SMIT has well qualified and experienced faculty members, and well-trained technicians. It has got residential hostels separately for 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. Our faculty has published their research work in reputed National / International Journals and National / International Conferences conducted during the Year 2023-24. The Institute has signed MoUs with reputed Universities, Industries and Corporate houses for the purposes, such as faculty exchange, student exchange & field trip, job training and Placement opportunities.

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There are research scholars registered for 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 incorporating self-regulatory responsibilities aimed to improve quality of teaching and achieving academic excellence in all the academic activities under the egis of IQAC which is functioning in the College since the 2011.

The Institution ensures, effective, decentralization and participative management through the functionalities of various 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, state of art technology, industry need skills in relevant areas of specialization, is blended with our academic program.

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

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

Civil engineering students attended an Entrepreneurship Development Programme at Anna University, Guindy Campus. Students visited Larsen and Toubro Ltd for 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

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Institute. Four students from the department went for Road Safety Traffic Field Survey in Porur Location in association with Chennai Traffic Police.

HoD S.Manikandan, successfully defended his PhD public viva voce examination on 20<sup>th</sup> October 2023 at Annamalai University. Four faculties are published their research 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, International Conference on Sustainable Environment and Civil Engineering, Indian Journal of Science and Technology. Faculties are attended FDP in various central and state institutions. Faculties Attended Naan Mudhalvan FDP for Concrete Building System Design hosted by L & T Edu Tech. Faculties are attended FDP on AI Tools for Streamlining Academic Research and Paper Writing, Innovative Teaching strategies and tools in the digital age, Outcome Based Education and application of Generative AI in Teaching and Research. Faculties of civil department attended various webinars and organized different workshops for students. Faculties and students are encouraged to do NPTEL courses offered by IIT Madras.

The **Department of Computer Science and Engineering** inaugurated CODENEXUS Club in 2023. Department of Artificial Intelligence and Data Science inaugurated, ARTIFIX Club in the current 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 – by using Python, delivered by Ms. Anandhi, Tech Lead, Livewire, Chennai. The Department organized a Seminar on Artificial Neural Networks in Data Science delivered 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

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at Tek Meadows, Chennai. Memorandum of Understanding was signed between PYROFERUS TECHNOLOGIES, Department of CSE & Department of AIDS in this academic year 2023. E-sports activity for collecting data was organized in association with AIDS - Artifix club.

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 organized by Government of Tamilnadu. Around 70 CSE & AI&DS students were participated in workshop and received certificate on "Data Anaytics with knime" from NSIC Technical Centre. Two students of CSE and AIDS department have successfully completed online course on "Systems and Usable Security" conducted by NPTEL on FEB 2024. FINAL year CSE & AI-DS students published their project ideas in the reputed International Journals and Conferences. Final Year CSE students Team was selected to show case their project developed through Naan Mudhalvan pilot scheme, 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. Two faculties from CSE, have participated two days FDP sum workshop on e-yantra conducted by IIT Bombay

Department of Electronics and Communication Engineering had been conducted various activities like Workshops, technical quiz, Project Expo, Seminar and organized internships and Industrial visit. Students attended Internship in "Artificial Intelligence composition exploring creative possibilities", Front end Internship including Project in companies like Marcelo, Empower Guiding center and RETECH Solutions Pvt.Ltd on the topic "Embedded System" and IoT and

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Embedded Systems. Third year students of ECE department attended internship offered by NSIC Technical service Centre on "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 organized by the department in order to encourage and show case student's talents. ECE department inaugurated Embedded Systems & IoT Tech club in this academic year. Dept Tech club has arranged various programs like 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", Workshop/ Hands on training in "Online Bus Ticket Booking Coding Using Python" and 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 their research 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

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ATAL FDP in Semiconductor Device Design from RTL to GDS-II. Six faculties of ECE department successfully completed online 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. Technical club of the department 'TESLA' organized various activities for students like...

- 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.

Ms.K.Prema Kandasamy of EEE department, successfully defend her public PhD viva-voce examination during the month of May 2024. The faculties of EEE, published their research paper in reputed publishers like EESEVIER, REST

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Publisher and international conferences. 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, Smart Grid and Integration of Distributed Generation, The Emerging Trends in Research and Teaching Technology, Integration of automotive and smart mechatronics system for sustainable mobility. 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 MoU with companies such as Design Cad Technologies, Prag Robotics, and VM Tech Solutions. 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 2023. 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 on online NPTEL 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 inaugurated "Techno Tuners Club" on 26<sup>th</sup> August 2023 by the SMIT Alumni Mr. S. Gurusharan, Principal Software Engineer, 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 undergone internship in Ajantha Technologies, Tech Solution System, Shiash Info Solutions Private Limited, Chennai. IT students have participated in cultural and sports events in various reputed 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. Mrs. K. Shanthi Ponraj attended FDP and also registered Ph.D in Anna University July 2023 Session. Mr.S Senthil Kumar, AP/IT attended IEEE and also pursuing Ph.D. 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**, PINNACLE PAPER and **Techive** as a part of Biomutantz held at CIT. 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 B.S. Abdur Rahman Crescent institute of science and technology on 27.03.2024. Second year

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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 Scenario" 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 "PharmaPinnacle: Elevating faculty Expertise in Pharmaceutical Sciences" organized by Vishwakarma University, Pune. Faculties participated in Inter-college sports held at VIT Chennai.

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Department of Science and Humanities organized 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 that for the past three years, the Heart fullness foundation in Chennai has organised a three-day meditation programme for first-year students, and we are grateful that they have signed an MOU with us.

Department is pride to announce to all that Ms.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 Anna university examinations result, One student achieved CGPA of 8.77. 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).

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Department of MBA organized industrial visit to Modern Bakers Pvt. Ltd. Madhavaram, Chennai. First & 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 15<sup>th</sup> 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 29<sup>th</sup> 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

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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 23<sup>rd</sup> 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 Mr.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

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given to this batch of students in the months to come. I request the students to make good use of these recruitment drives.

Some of the Industries where our students got selected are:

S.No	Company Name	S.No	Company Name
1.	CMS IT Services	21	Qspiders
2.	Hakuna Matata	22	Waycool Products
3.	Global Soft Solutions	23	TCS
4.	KRG Technologies	24	FACE
5.	Softsolutions4U	25	Kotak Ltd
6.	Qmax Systems	26	Teach For India
7	KAAR Technologies	27	CRISIL
8.	Surya Informatics	28	HCL
9.	Path Front Technologies	29	Aagna Global
10.	Ameex Technologies	30	Healthwatch
11.	4D Technologies	31	Dunamis Machines
12.	NVH India Pvt Ltd	32	Super Auto Forge
13.	Vortex Engineering	33	Neolync
14.	Sutherland Global	34	Foxconn Hon Hai
15.	Paragon Digital Services	35	e-con Systems India
16.	Amazon	36	India Japan Lighting
17.	Infosys	37	Just Dial Limited
18.	Tringapps	38	J & F (India) Private
19.	Valued Epistemics	39	Chemleon
20.	Sri Ram Transports		

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