# Mohamed Sathak AJ College of Engineering, Chennai - 603103 Annual report of Academic year 2023 – 2024

#### AWARDS AND RECOGNITION

The Academic Year 2023 – 2024 was eventful and Mohamed Sathak AJ College of Engineering has reached new milestones and excelled in several activities this year.

- Department of Mechanical Engineering is accredited by NBA for three years.
- Department of Mechanical Engineering is recognized as Nodal research center under Anna University.
- Our institute has held ISO 9001:2015 certification since 2022, with regular surveillance audits being conducted. We are currently in the process of upgrading to ISO 21001:2018 certification for the academic year 2024-2025 through IRQS.
- The MHRD Innovation Council has granted 3/5 star rating for the innovative efforts of the institution
- In the journey of imparting Technical Education, MSAJCE became an Autonomous Institution from the academic year 2024 2025.
- To Establish an approved Idea Lab under self-financing scheme from the academic year 2023- 2024.
- UGC 2f Status is achieved.
- Upgrading the Department of ECE as Nodal research center under Anna University.
- Registered in NIRF ranking for the year 2023-24.

### **ADMISSIONS**

In this academic year we have introduced one new UG program B.E. Computer Science and Engineering -Cyber Security .

MSAJCE is attracting the top performers of +2 examinations. In the TNEA

process 2022 – 2023, 83.3% of our seats got filled up in the counseling with highest cut off mark of 172 and average cut off mark of 125

During this year more than 750 engineering aspiring students along with their parents have visited our campus for considering MSAJCE as their preferred Institution for admission.

#### **Academic Performance**

Year after year, our students show excellent academic performance in the Anna University Examinations. The highly creditable academic performance of our students in their end semester examinations is the proof in the palm of the excellence of our students and the dedicated services rendered by our staff. This year, our immediate passed out students of batch 2023- 2024 have showed more impressive graduate pass percentage of 78%.

## QUALITY INITIATIVES TO ENHANCE ACADEMIC EXCELLENCE

- 28 class rooms are converted into ICT enabled class room and 4 seminar halls with smart class room facility.
- Various technical events were accomplished through professional society for the benefits of students.
- Online Certification Courses for all the faculty members is made compulsory and the students are motivated to complete the certification courses from various organizations like NPTEL and Coursera
- Faculty members and the students use Google classroom for sharing the materials related to academics.
- Campus wide Wi-Fi facility was enhanced and speed was increased from 300MBPS to 700MBPS.
- 10 MoUs were signed with leading industries / associations for internship and project, with this addition the total number of live MOUs is 60.
- Under Activity based learning 205 students completed hands on training through our Technology center and certified by NSDC, Govt of India, 206 students completed Value added course offered by Anna University, 889 students completed hands on training in cutting edge technology courses

- through Naan Mudhalvan Program of Govt. of Tamilnadu Initiative, 180 students completed certification through PMKVY scheme.
- A total of 81 students successfully completed 166 online courses in selflearning, while 963 students participated in the Spoken Tutorial program provided by IIT Bombay. Additionally, 85 students achieved NPTEL Certifications.
- Our students made their best effort to bring laurels to the college through
  Competitive based learning by participating in the events such as technical
  symposiums, inter-college competitions, Sports and won number of prizes.
   Some of the glimpses are
- Our students participated in 18 national level competitions in the year 2023.
- One of our students team won Runner-up in eYantra Robotic Competition organized by IIT Bombay.
- Social service initiatives, including a blood donation camp, a tobacco awareness camp, an eye screening camp, a donation drive for an old-age home, and an election awareness camp, were conducted under the auspices of NSS and UBA.
- External Academic Audit was conducted for R2021 curriculum.
- Our Library is enhanced with Digital Library facility.

### Flagship Events of MSAJCE

- 1. In the year 2023, a career guidance program titled Engineers Edge was organized for the benefit of students, which included over 15 industrial visits, more than 100 internships, 7 seminars, and 13 talks by industry experts.
- 2. In the context of innovative learning facilitated by the Institute Innovation Council, which is supported by the Ministry of Education, a total of 46 events were organized in 2023 to promote awareness regarding innovation.
- 10+ MOUs signed in the year 2023 with leading industries to provide Industrial visit, Internship, Placement opportunity, consultancy work, innovative projects, Guest lecture / seminar in cutting edge technology, and mould the students as industry ready products.

Student and Faculty exchange program are offered since 2021, at National and International levels with institutions and industries of repute. Under this program 10 students were attended the International internship in Online mode with MIT Square London under RAISE Program in the month of May 2024.

8 students benefited under student exchange programme conducted through the AICTE Yuva sangam - Ek Bharat Shresta Bharat initiative of MOE, Govt. of India, our students visited Tripura, Rajasthan, Bihar Uttarkand to learn the culture, tradition, livelihood and resources available in the state. 30+ students were visited to Bannari Amman Institute of Technology, Coimbatore as part of this program.

Faculty are the backbone of any academic institute, they are in need of continuous grading of their skills, as a part of this Four of our faculty from department of CSE trained and certified in Essential & Advanced Level in Robotic Process Automation by Automation Anywhere.

Four faculty members from the department of ECE and EEE are trained and recognized as certified trainer for E-Yantra initiative of IIT Bombay. 3 faculty from Mech and EEE trained at Godrej Boyce Manufacturing Pvt Ltd, Mumbai. 3 faculty member from IQAC were trained by Institute for Academic Excellence (IAE), Hyderabad in Accreditation and Outcome based Education. 17 faculty members trained as Innovation Ambassadors by MOE, GOI. All our internal faculty was trained in the various cutting edge technology as a part of Naan Mudhalvan programme of Govt. of Tamilnadu Initiative since 2022.

- Dr.Shanmugasundaram & Mr. Vigneswaran from Mech Engg trained in AIDS in IIIT, Nagpur, Mrs Anusuya ECE trained in AIDS in IIIT, Kotayam, under QIP scheme, Dr.I.Manju and Mr.M.Kamarajan from ECE trained in EDA tools by Cadance Bangalore.
- Mr.Tharani Kumar form Mechanical engg department successfully completed Trainer's Training in Entrepreneurship organized by Entrepreneurship Development Institute of India Ahmedabad in 2023.
- 75+ Anganwadi employees of Govt. of Tamilnadu trained by our faculty at our college in the year 2023.

### **Industry Interaction**

The following interaction activities were conducted with industries during this academic year

- 1. Consultancy services offered to Godraj Home Appliances since 2020.
- 2. 200+ students have undertaken internships in around 20+ industries.
- 3. In order to provide the opportunity for experiential learning, industrial visits arranged for our students.
- 4. Experts from industries have given guest lectures and expert talks.

#### **Research Thrust**

The real development of institutions of higher learning can happen only when the teaching and research happens simultaneously. Our college encourages the research both at student and staff level.

To promote research, the college encourages and sponsors faculty members to pursue higher education. About 40 % of our faculty members are possessing Ph.D qualification and 20 of our Faculty members from various departments are pursuing PhD in reputed institutions.

**7** of our faculty members are recognized supervisor for research programs in addition 2 members were applied for supervisor recognition.

Our faculty submitted the various proposal for the worth of Rs 200 lakh for research project to the funding agencies DST, AIC and STI Hub.

The motivation and supportive environment provided by the college to its faculty members in pursuing research have started yielding in terms of journal publications.

During the academic year 2023-2024, a total of 81 papers have been published in esteemed journals. The institution's h-index stands at 14. Additionally, 23 patents

were issued this year. To encourage a robust research culture within the college, cash prizes were presented to faculty members during the Teacher's Day Celebration, and 50% financial assistance was provided for patent applications and publications in reputable journals.

#### **Student Achievement**

- A student from our college participated in the Mapathan event organized by IIT Bombay, where three teams achieved runner-up status and four teams were recognized as notable participants.
- Women Hackathon organized by Govt. of Tamilnadu, 3 teams received runner up status.
- Poster making competition organized by MIT Square London on International Women's sday, our students team won 1<sup>st</sup> Prize.
- AIML Challenge phase 1 organized by IIT Madras our students won 1<sup>st</sup> prize.
- Technoxion 2024 A World Robotic Competition, our students won Runner up with cash prize.
- Our students received 1<sup>st</sup> prize in 3D Virtual World Building Contest organized by Zimension Virtual 3D Space.
- One of our students team won Tamilnadu Business Iconic Award awarded by IB Think online Academy.
- English essay writing competition organized by Hindustan University our students won overall Runner- up
- In Tamil Thirukural recitation completion organized by Kamban Kalagam, Chennai our student received 3<sup>rd</sup> prize.
- In addition 13+ Inter department competition were organized in 2023 to realize the completion based learning.
- 3 students are recognized as Tedx Speakers

### **Staff Achievement**

Some of the achievements made by our faculty members are:

- Dr.D.Weslin Prof / CSE received Best Coordinator Award from CSI chapter Kanchipuram.
- Dr.S.Devikala Prof / EEE received Women Educator of the year and Bhishma Achariya Award.
- Mr.Sunil Kumar AP / Mech received Best researcher Award in 13<sup>th</sup> edition of young Scientist Awards 2023.
- Mrs.S.Sudha AP / Maths received Best young researcher award from Knowledge Research Academy.
- Dr.Nazeema Prof / Tamil received Tamil Kambam Kazhaga Virudhu.

A total of 150 Faculty development programs were attended by our faculty which is conducted by NITTTR, AICTE Sponsored, NPTEL and Nan Mudhalvan Scheme.

Few of our faculty members were invited to deliver talk in various institutions about recenttechnologies.

### **Placement & Training**

The placement achievements of our college are exceptionally noteworthy, reflecting our commitment to the future success of our students. The institution equips all students with both technical expertise and essential life skills. From the 2023 graduating class, 130 out of 156 eligible and interested students have secured positions in various esteemed organizations.

We engage professional trainers to prepare our final year students for placement, in addition to utilizing our own faculty trainers. Few of our Major recruiters are TCS, Hitachi, Zoho, Q Burst, Dev Care Solutions, Doodle Blue, Wipro Manufacturing, J digitals, Oasis Technology and Guvi the Highest Package is 6 Lakh and average Package is 3.2 Lakh per annum.

Our primary objective is to empower our students to become creators of employment opportunities rather than merely seeking jobs. Several initiatives have been implemented to provide training for startups, support incubation, facilitate entrepreneurial activities, offer in-house foreign language training classes, and provide guidance for GRE, GATE, and TOEFL examinations to assist individuals in pursuing higher education and preparing for various competitive and public service examinations.

#### **Alumni Association**

The college nurtures healthy relationship with its alumni by inducting all the final year students into it. We have formally registered alumni association under registration Act during 2021-2022. Office bearers were elected and an alumni meet is conducted regularly in the month of Feb every academic year.

Alumni have actively supported the institution by organizing webinars, engaging with students, and conducting mock interviews. During the 2023-2024 period, alumni members contributed a total of Rs. 6.36 Lakhs to the institution.