

MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)



(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu

INTERNAL QUALITY ASSURANCE CELL

Annual Report

Academic Year (2019-20)

PROFILE OF THE INSTITUTION

Muthayammal Engineering College,an Autonomous Institution affiliated to Anna University, Chennai was established in the year 2000 under the aegis of Muthayammal Educational Trust and Research Foundation with the motto to uplift the rural community through Technical Education. The College has grown as a reputed Institution in the past 20 years and progressing with the aim to become Centre of Excellence in Engineering Education, Research and Development. MEC started with 3 Under Graduate Programmes in Engineering in the year 2000 and presently offers 10 Under Graduate and 6 Post Graduate Programmes with 3000 Students in the campus.

Based on the Quality of Teaching, Research and Placement Records, the Institution is accredited by NAAC.National Board of Accreditation has accredited Four Programmes: Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering and Mechanical Engineering. Institution is recognized 2f & 12B under UGC Act. Anna University, Chennai has granted Permanent Affiliation for 10 Programmes. Also recognized with ISO 9001:2015 Certification. Institution is Accredited by Tata Consultancy Services and Wipro Technologies for various activities including recruitment.

AWARDS AND RECOGNITIONS

- Best Private College in Tamil Nadu 2019 by Centre for Education Growth and Research
 (CEGR) for Outstanding Contribution to Education, Skill and Research
- Best Educational Campus in South India for Academic Facilities and Learning Resources by Asia Pacific Education & Technology Awards (APETA) 2020
- Best Division Award 2020 by The Institution of Engineers (India)
- Partner of the Decade Award by ICT Academy in 2020
- Participated in NIRF Ranking 2020 in Engineering Category
- MEC Ranked under B and C with 18th Ranking Out of 34 Institutions in ARIIA 2020

- GHRDC-CSR Engineering College / Institute Survey 2020 28th Position in Tamil Nadu
- INDIA TODAY-MDRA 2020 –Overall Ranking:182
- THE WEEK Hansa Research Engineering College Survey 2020 Private Category Ranking: 158
- Careers360 Engineering Ranking/Rating 2020 AAA Category in Tamil Nadu

ACADEMIC EXCELLENCE

- Implemented 2019 Regulation in Curriculum for all UG and PG Programmes
- Quality of Teaching Learning has enhanced through TASTE, MuDiL, Faculty Visit to Industries/Institutions, Faculty Guest Talk, Faculty Recharge Program and Faculty Support for Student Activities
- ICT Enabled Classrooms, Seminar Halls, Computer Centers, Library and Information Center and other Amenities are renovated with adequate Facilities
- NPTEL Online Certification Courses are registered and received Certificates by Faculty and Students
- Programmes/Courses are focused on Employability/Entrepreneurship & Skill Development
- Value Addition/Skill Development Courses are offered for imparting Transferable and Life Skills
- Field Projects and Internships are undertaken by the Students
- Seminars, Guest Lectures, Workshops and Interaction with experts from Academia and Industry are organised to enhance the Technical and Soft Skills of the Students
- E-learning Resources like e-Books, e-Journals, NDLI, NPTEL Lectures, DELNET, IEEE,
 J-GATE, DIRF, Invention SAGE publication for the enhancement of Teaching and Learning Activities
- Muthayammal Virtual Learning Centre (MVLC) act as the repository for Learning Resources
- Students are provided with Meritorious Scholarship through Muthayammal Educational Trust and Research Foundation

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FACULTY RESOURCES AND CONTRIBUTION

- Faculty Participation in Seminars/Workshops/Conferences, etc., : 2717
- Faculty Completed NPTEL Online Certification Course: 376
- Patents Published:20
- Books and Chapters Published: 43
- Faculty Awards and Recognitions: 44

The significant Awards are as follows,

- Principal of the Year 2019 Centre for Education Growth and Research (CEGR)
- ISTE Periyar Award for Best Engineering College Teacher
- IE(I) Best Engineer Award
- Enlightening inquisitiveness Teacher Award-Indo-Global Submit and Awards 2019
- Outstanding Research Faculty Award Amaravathi Research Academy
- Professor of the Year for Teaching and Research in India Asia Pacific Education and Technology Awards
- Research Excellence Award Institute of Scholars
- Outstanding Educator Award International Academicians and Researchers Conclave
- Best Engineering College Teacher ISTE
- Best Women Faculty Award Novel Research Academy
- Engineering Excellence award ISIE INDIA
- Nehru Women Excellence Award
- Best Contribution in Education Award -Innovation Society India
- IARDO Academic Excellence Awards
- C# Corner Most Valuable Professional Award
- Teacher Innovation Award

RESEARCH AND CONSULTANCY EXCELLENCE

Research Activities:

Proposals submitted to various Funding Agencies: 242

Research Papers Published in Peer Reviewed Journals: 141

• Seed Money provided to the Faculty: Rs.10,30,000

• Faculty Members with Ph.D: 65

Ph.D produced since Inception : 52

Recognized Research Supervisors: 18

Ph.D Scholars on role: 67

Industry-Institute Interaction Program Organized :95

MoUs are signed with Industries

Consultancy Activities:

S. No.	Name of the Consultant(s) Department	Name of Consultancy Project	Consulting/ Sponsoring Agency	Revenue Generated (amount in Rupees)
1	CSE	Secure Data Services in Cloud	Pentagram Research Centre Pvt.Ltd.	Rs.2,50,000
2	CSE	Process and Project Management Consultancy	iGenuine Soft Solutions Pvt.Ltd.	Rs.2,15,000
3	CSE	Artificial Intelligence for Disease Diagnosis	ABE Semiconductor Designs	Rs.3,50,000
4	ECE	IoT Platform Development using Machine Learning Algorithm for Automation	Vee Eee Technologies Solution Pvt. Ltd, Chennai	Rs.2,10,000
5	ECE	Embedded Product Development	iGenuine Soft Solutions Pvt. Limited, Chennai	Rs.2,00,000
6	ECE	Machine Learning Based Image Segmentation for Glaucoma	Signals and Solutions, Kambar Street, Alandur Chennai	Rs. 3,00,000

7	EEE	Home Automation Embedded System using IoT	Iologix Automation Solutions ,Chennai	Rs.1,00,000
8	EEE	IoT Based Induction Motor Monitoring System	SM Electrical and Automation	Rs.1,00,000
9	EEE	Solar Grass Cutter	Radha Electricals &Hardwares	Rs.2,00,000
10	EEE	CCTV Installation	Mettur Transport Company	Rs.1,25,000
11	MECHANICAL	Development of Solar Tractor	DD Engineering Services,Chennai	Rs.1,49,240
12	MECHANICAL	Sludge Removal using Pulsed Power Supply	Zero Discharge Technologies Pvt.Ltd. Coimbatore	Rs.2,11,864
13	MECHANICAL	Estimation of Blower and Diffuser requisite in the Aeration System	Zero Discharge Technologies Pvt.Ltd. Coimbatore	Rs.3,09,000
14	MECHANICAL	Facilitation Centre for Training the Students & Corporate Person towards Lean and Six Sigma	MSME ,Chennai	Rs.30,750

Funds/Grants received from various Government Agencies:

S. No.	Institution/ Department/Faculty	Scheme	Funding Agency	Year of Award with Duration	Amount
1	Dr.M.Madheswaran	Popular Lecture Series	DBT	2020/3 Days	Rs.2,05,000
2	Dr.M.Madheswaran	Seminar Grant	CSIR	2020/2 Days	Rs.50,000
3	Dr.U.Saravanakumar	Seminar Grant	CSIR	2020/2 Days	Rs.30,000
4	Dr.U.Saravanakumar	Seminar Grant	CSIR	2020/2 Days	Rs.30,000
5	Dr.R.Praveena	Seminar Grant	CSIR	2020/2 Days	Rs.30,000
6	Dr.R.Prakash	Seminar Grant	CSIR	2019/ 2 Days	Rs.50,000
7	Dr.P.Srinivasan	Seminar Grant	SERB	2019/ 2 Days	Rs.50,000
8	Dr.E.Punarselvam	Seminar Grant	CSIR	2019/2 Days	Rs.20,000
9	Dr.R.Thanigaivelan	Symposium	DST- SERB	2019/ 2 Days	Rs.75,000
10	Dr.R.Thanigaivelan	Workshop	ICMR	2019/ 3 Days	Rs.50,000

11	Dr.R.Thanigaivelan	Seminar Grant	CSIR	2019/ 2 Days	Rs.15,000
12	Dr.R.Thanigaivelan	Workshop	IE(I)	Days 2020/ 1 Day	Rs.10,000
13	Dr.R.Thanigaivelan	Workshop	IE(I)	2020/ 1 Day	Rs.23,500
14	Dr.P.Suresh	Workshop	CSIR	2020/ 2 Days	Rs.30,000
15	Dr.P.Suresh	Seminar Grant	DST	2020/ 2 Days	Rs.50,000
16	Dr.P.Suresh	Popular Lecture Series	DBT	2020/3 Days	Rs.2,10,000
17	EEE	MODROBS	AICTE- AQIS	2019-20/ 2 Years	Rs.15,08,334
18	EEE	STTP	AICTE- AQIS	2019-20/ 6 Days	Rs.3,00,000
19	Dr.R.Prakash	Workshop	TNSCST - DIT	2019-20/ 5 Days	Rs.50,000
20	EEE	Seminar	IE(I)	2019-20/ 1 Day	Rs.10,000
21	Muthayammal Engineering College	Start - Up Club for SC/ST Students	AICTE- AQIS	2019-20/ 2 Years	Rs.10,80,000
22	ECE	MODROBS	AICTE- AQIS	2019-20/ 2 Years	Rs.12,15,536
23	ECE	MODROBS	AICTE- AQIS	2019-20/ 2 Years	Rs.6,98,634
24	CSE	STTP	ISTE	2019-20/ 7 Days	Rs.25,000
25	CSE	STTP	ISTE	2019- 20/ 7 Days	Rs.25,000
26	CSE	STTP	ISTE	2019-20/ 7 Days	Rs.25,000
27	Muthayammal Engineering College	Establishment of Skill and Personality Development Programme Centre for SC/ST Students (SPDC)	AICTE- AQIS	2019-20/ 3Years	Rs.16,60,791
28	CSE	FDP	AICTE- AQIS	2020/14 Days	Rs.5,43,500

29	МЕСН	MODROBS	AICTE- AQIS	2019 - 20/ 2 Years	Rs.13,72,537
30	MECH	Conference	AICTE- AQIS	2019-20/ 1 Year	Rs.3,38,333
31	MECH	Impact Lecture Series	AICTE- IIC	2019-20/ 2 Days	Rs.40,000
32	МЕСН	FDP	AICTE - ATAL	2020/ 5 Days	Rs.93,000

SKILL AND CAREER DEVELOPMENT

- 429 offers are received by the Students from various Multinational Companies
- Higher Education Cell (HEC) is formed exclusively for motivating and providing exposure to students on pursuing higher studies in India and Abroad through CAT, MAT, GMAT, SAT, GRE, TOEFL
- Muthayammal Gate Academy (MuGA) conducts more programs to encourage the students for Graduate Aptitude Test in Engineering (GATE) Exam
- Career Guidance Cell supports Students in taking up various Competitive Examinations
- Entrepreneurship Development Cell organizes various awareness programs for Students to become Entrepreneur. The Industry Experts guide the students to excel in idea generation and the incubation of ideas for developing the products in the future

ALUMNI INTERACTION AND CONTRIBUTION

Alumni Association is to strengthen and cultivate the relationship between the Alumni, Students and the Institution. Association acts as a Brand Building for the Institution by spiraling the image and prominence of the Institution in which they graduated. This helps to enrich the quality of Placement. Alumni meet was conducted periodically around 200 Alumni has participated and shared their experiences.

Alumni Interaction and Mentoring are regularly organized for the students in coordination with Training and Placement Cell.

 Ms.A.Aruna, CSE Alumni of 2018 PG Batch conducted an interaction on "Cloud Business Process Services" for CSE Department Students on 29.02.2020.

- Mr.K.Aravind, CSE Alumni of 2015 Batch has interacted on "Staircase for Successful Professional" for CSE Students on 12.10.2019.
- 3. Mr.G.Previnkumar, CSE Alumni of 2019 Batch conducted an interaction on "Carrier Guidance for the Future" for CSE Students on 28.09.2019.
- Ms.N.Lavanya, CSE Alumni of 2019 Batch conducted an interaction on "Stepping Milestone for Professional" for CSE Students on 28.09.2019.
- Mr.R.Aravinthkumar, CSE Alumni of 2014 Batch conducted an interaction on "Ladder for Future Professional" for CSE Students on 11.09.2019.
- Ms.G.Lavanya, CSE Alumni of 2019 Batch conducted an interaction on "Center for Campus to Corporate" for CSE Students on 05.08.2019.
- 7. Mr.M.Sathiskumaran, and Mr.S.Vijay, CSE Alumni of 2018 Batch conducted an interaction on "Nature of Industry Requirements" for CSE Students on 05.07.2019.
- 8. Mr.K.Karthickraja, CSE Alumni of 2018 Batch conducted an interaction on "Hacking Techniques" for CSE Students on 05.07.2019.
- Ms.V.Dhivya Kamachi, CIVIL Alumni of 2017 batch conducted a interaction on "Bar Bending Concepts & Interview Tips" for CIVIL Department Students on 22.10.2019
- Mr.G.Pradeep, CIVIL Alumni of 2018 batch conducted an interaction on "Modelling& Drawing" for CIVIL Department Students on 05.11.2019.
- 11. Ms.S.Karthika, CIVIL Alumni of 2018 batch conducted an interaction on "How to Prepare Government Exams" for CIVIL Department Students on 03.01.2020.
- 12. Mr.N.Surendar,ECE Alumni of 2008 batch conducted an interaction on "Internet Technology" for ECE Department Students on 14.09.2019.
- 13. Mr.Balasundar, ECE Alumni of 2008 batch conducted an interaction on "Automation & Data Analysis for Electronics Engineers" for ECE Department Students on 28.09.2019.
- 14. Mrs.R. Monisha, ECE Alumni of 2017 batch conducted an interaction on "Embedded Systems for Industrial Applications" for ECE Department Students on 21.02.2020.
- 15. Mrs.T.Santhiya,ECE Alumni of 2018 batch conducted an interaction on "The Open Source Software Develop" for ECE Department Students on 10.03.2020.
- 16. Mr.M.Srinivasan,ECE Alumni of 2011 batch conducted an interaction on "3D Volumetric Visual Technology" for ECE Department Students on 14.03.2020.
- 17. Mr.M. Vishnukumar, EEE Alumni of 2015 batch conducted an interaction on "Interaction about Future of EEE Guys", for EEE Department Students on 14.09.2019.

- 18. Mr.M.Dinesh,EEE Alumni of 2017 batch conducted an interaction on "Need of Embedded System" for EEE Department Students on 11.11.2019.
- 19. Mr.R.Nithyanandan, EEE Alumni of 2012 batch conducted an interaction on "Interaction on Core Industry Placements", for EEE Department Students on 23.11.2019.
- 20. Mr.S.Balamurugan, EEE Alumni of 2010 batch conducted an interaction on "Motivation about Core Industries" for EEE Department Students on 03.02.2020.
- 21. Mr.M. Ebrahim Ansari, EEE Alumni of 2016 batch conducted an interaction on "Personality Development to Meet the Industry Requirement", for EEE Department Students on 18.02.2020.
- 22. Mr.A.Saravanan, EEE Alumni of 2005 batch conducted an interaction on "Recent Trends in Power System", for EEE Department Students on 24.02.2020.
- 23. P.T. Sharad Chandran, EEE Alumni of 2012 batch conducted an interaction on "Motivation about IT Industries", for EEE Department Students on 02.03.2020.
- 24. K Aravinth, P Gokulraj, IT Alumni of 2016 batch conducted an interaction on "Career Guidance and Full Stack Development" for IT Department Students on 13.07.2019
- 25. Mrs. Vijaya Srinivasan,IT Alumni of 2016 batch conducted an interaction on "Transition College to Corporate" for IT Department Students on 26.08.2019.
- 26. Ms.M.Bhuvaneshwari, IT Alumni of 2015 batch conducted a interaction on "Motivation and Placement Preparation" for IT Department Students on 19.10.2019.
- 27. Ms.V.S.Janani,IT Alumni of 2015 batch conducted an interaction on "Software Development Life Cycle" for IT Department Students on 19.10.2019.
- 28. Mr.Selvam Selvamani,IT Alumni of 2013 batch conducted an interaction on "Networking and its Applications" for IT Department Students on 31.10.2019.
- 29. Mr.Sakthivel Manoharan,IT Alumni of 2015 batch conducted a interaction on "Measuring the impact of user Engagement using Campaign Analytics Methodology" for IT Department Students on 25.01.2020.
- 30. Mr.Narayanan Murugesan, IT Alumni of 2015 batch conducted a interaction on "Neuro Linguistic Programming" for IT Department Students on 27.01.2020.
- 31. Mr.Sabari Raj Sundaram,IT Alumni of 2017 batch conducted a interaction on "Mainframe Vision Plus" for IT Department Students on 27.02.2020.
- 32. Mr.P L Meenakshi Sundaram,IT Alumni of 2012 batch conducted a interaction on "Career Choice: Data Science, Big Data and Advanced Analytics" on 28.02.2020.

- 33. Mr.M.Suresh, Officer DST, Chola Insurance Xpress, Tiruchengode, MBA Alumni of Batch 2014 conducted a interaction on "Motivational Talk", to MBA Department Students on 30.10.2019.
- 34. Ms.Piyali Mistry, HR Executive, Voltech HR Solutions, Chennai, MBA Alumni of batch 2019 conducted an interaction on "Motivational Talk", to MBA Department Students on 21.01.2020.
- 35. Mr.B.Naveenkumar, Accounts Manager, Global Hospital, Chennai, MBA Alumni of batch 2018 conducted an interaction on "Motivational Talk", to MBA Department Students on 05.11.2019.
- 36. Mr.K.Balaji, Mechanical Alumni of 2013 batch conducted a interaction on "Skill Set Required to Serve in Corporate" for Department of Mechanical Engineering Students on 31.08.2019.
- 37. Mr.S.Ram Prakash, Mechanical Alumni of 2010 batch conducted a interaction on "Role of Engineer in Core Organization" for Department of Mechanical Engineering Students on 14.09.2019.
- 38. Mr. S.Aravinda Balaji, Mechanical Alumni of 2010 batch conducted a interaction on "Career Opportunities in Lean Six Sigma Organization" for Department of Mechanical Engineering Students on 20.09.2019.
- 39. Mr.Tamizhavel Elango, Mechanical Alumni of 2008 batch conducted an interaction on "Challenges in Die Casting Processes" for Department of Mechanical Engineering Students on 11.12.2019.
- 40. Alumni Reunion 2020 organized by Department of ECE on 18.01.2020
- 41. CSE Alumni Meet-2019 (Batches from 2004 to 2019) conducted by CSE Department on 21.12.2020.

Alumni supports the Institution by providing valuable feedback in various aspects like Teaching -Learning Process, Research, Innovations, Infrastructure and other Amenities. Alumni Students extend their contribution through Placement, Internships, Guest Lectures, Seminars and Financial Assistance for developmental activities in the Institution.

PROFESSIONAL SOCIETIES, CLUBS AND CELLS

PROFESSIONAL SOCIETIES

The various activities are conducted for the Faculty and Students in association with Professional Societies to enhance the Technical and Professional Skills. Faculty and Students are the members of the Professional Societies.

The following are the Professional Societies in the Institution.

- Indian Society for Technical Education(ISTE)
- The Institution of Engineers (India) IE(I)
- Institute of Electrical and Electronics Engineers (IEEE)
- Institution of Electronics and Telecommunication Engineers (IETE)
- Indian Society for VLSI Education (ISVE)
- Society of BioMedical Engineers India (SBMEI)
- Computer Society of India (CSI)
- Indian Institute of Welding (IIW)
- Society of Automotive Engineers (SAE)
- The Robotics Society (TRS)
- Indian Concrete Institute (ICI)

Clubs and Cells are effectively functioning for the Students to provide opportunity to exhibit their talents by participating in various programs. Activities are organized under Science Club, Higher Education Cell, Career Guidance Cell, English Literary Club, Environmental Club, Sri Srinivasa Ramanujan Club/Mathematics Club, Fine Arts Club, Tamil Mandram, Green Club, Yoga and Meditation Club and Sports Club, etc. for the benefit of the Students.

Women Empowerment Cell (WEC) has organized Awareness Programme on Adolescent Health, Yaadhumaagiv Nindraai, etc. for Female Students. International Women's Day is celebrated every year on March 8th by conducting competitions and Girl Students are recognized. In addition events like Singing, Dancing, Mono Act and Mime are organized for Students by Fine Arts Club.

Yoga and Meditation Club conducts awareness programs like, Art of Yoga, Yoga as a Effective Tool for Wellness - COVID 19, National Seminar on Yoga for Youth, Workshop on Well-being is Yours: While connecting with Minds, Webinar on Yoga as a Powerful Tool for Healthy and Safe Life - COVID 19 and International Yoga Day etc., are organized for the wellness of Faculty and Students. National and Regional festivals like Pongal, Deepavali, Pooja, Special Days like Teacher's Day, Engineers Day and Students Day etc. are celebrated.

EXTENSION AND OUTREACH ACTIVITIES

National Service Scheme (NSS) and Youth Red Cross (YRC)

As a part of Personality and Community Development activities, National Service Scheme and Youth Red Cross units are functioning in the Institution with more than 200 volunteers. Students are motivated for Community Service through NSS and YRC.

Some of the significant social activities conducted for the benefit of society are:

Programs Organized: National Service Scheme

- Awareness Program-Postal Schemes and Employment Registration
- Tree Plantation
- Plastic Free Awareness Rally
- Smart Walk-National Sports Day Celebration
- Campus Cleaning Awareness
- Fire Safety-An Awareness program
- First Aid Camp
- World Hearing Day Awareness
- Awareness Program on Aforestation
- Blood Donation Camp

Programs Organized: Youth Red Cross

- Swachh Bharath Awareness
- Diabetic Screening Camp
- Awareness on AIDS, HIV and ART
- Free Medical Camp
- Awareness Program on Adolescent Health
- Demo Program for Fire Safety and First Aid
- Awareness Rally on Road Safety
- Environmental Awareness Program
- World Water Day Awareness Rally
- Free Dental Camp

SPORTS ACTIVITIES

Department of Physical Education has well equipped Sports Facilities to cater the need of Students in Extracurricular activities. The Institution has enough Infrastructures in the campus for Indoor and Outdoor Games, Gymnasium, Yoga and Cultural Activities. Facilities for the outdoor games such as Volleyball, Football, Kabaddi, Cricket, Kho-Kho, Ball Badminton, Handball and Indoor Games such as Chess and Table Tennis are available.

In the current year 23 Sports competitions are organized by the Institution. The students participated in National, State, University, Zonal and Interzonal level tournaments and won prizes. Gym is available for both Faculty and Students. It includes 10 station like, multi Gym, Tread Mill, Double Side Twister, Gym Ball, Bench Press, tumble, Spin Bike, and Weighing Scale.

IQAC Coordinator

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MUTHAYAMMAL ENGINEERING COLLECT
(AUTONOMOUS)
RASIPURAM-637 408, NAMAKKAL Dist
TAMILNADU.

Chairperson IQA

PRINCIPAL, W MUTHAYAMMALENGINEERING COLLEGE (AUTONOMOUS) RASIPURAM-637 408. NAMAKKAL Dist, TAMILNADU.