

# **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 (2021-22)

### **PROFILE OF THE INSTITUTION**

Muthayammal Engineering College 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 21 years and progressing with the aim to be a Centre of Excellence in Engineering Education, Research and Development. Mission of the Institution is to prepare the Students with High Professional Skills and Ethical Values, to impart Knowledge through Best Practices, to instil a spirit of Innovation through Training, to undertake Continuous Assessment, Remedial Measures and to achieve Academic Excellence through Intellectual, Emotional and Social Stimulation.

Institution offers 12 Under Graduate, 6 Post Graduate and 3 Ph.D Programmes. Institution has been granted Autonomous Status by UGC during the Academic Year 2016-2017. Institution is Accredited by NAAC and Four Undergraduate Programme (CSE, ECE, EEE and MECH) are Accredited by NBA. Institution is recognized 2f & 12B under UGC Act. Anna University, Chennai has granted Permanent Affiliation for 10 Programmes. Also recognized with ISO 9001:2015 and ISO 14001:2015 Certification. Institution is Accredited by Tata Consultancy Services and Wipro Technologies for various activities including recruitment.

#### **AWARDS AND RECOGNITIONS**

- Muthayammal Engineering College is one among the 49 Institutions Identified in India for establishing the AICTE IDEA Lab. The Project Cost for establishing the IDEA Lab at Muthayammal Engineering College is 1.32 Cr. It is great to note that only 5 Institutions are identified in Tamil Nadu to Establish the Lab with the Financial Support of AICTE.
- Institutions Innovation Council 3.0 (2020-21) Annual Performance College and Stand alone Institution Category – Four Star Rating from Ministry of Education, Government of India
- 18<sup>th</sup> Rank in B and C Category in ATAL Ranking of Institutions on Innovation Achievements (ARIIA) 2021
- Participated in National Institutional Ranking Framework (NIRF)
- INDIA TODAY-MDRA Overall Ranking :199

- GHRDC-CSR Engineering College / Institute Survey 2022 15<sup>th</sup> Position in Tamil Nadu
- DQ-CMR Best Tech Schools Survey 2022- Top 100 T-Schools (overall) Government and Private Sector -77<sup>th</sup> Position
- THE WEEK Hansa Research Engineering College Survey 2022- 170th Rank
- Careers360 Engineering Ranking/ Rating 2022- AAA+ Category in Tamil Nadu
- Times Engineering Survey 2021- Overall Ranking :166<sup>th</sup> Position
- Top Engineering College of Excellence in India 2022 by CSR

# ACADEMIC EXCELLENCE

- 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
- Faculty Members use Smart Classroom facilities for the effective Teaching and Learning Process
- Free online accessible platforms such as Google Classroom, OpenEdx, Google Meet, Cisco WebEx and Microsoft Team are used for Learning and Assessment
- Institution has Industry Supported Laboratories with state of the art facilities
- Programmes/Courses are focused on Employability / Entrepreneurship & Skill Development
- Value Addition/Skill Development Courses are offered for imparting Transferable and Life Skills
- Online Public Access Catalogue (OPAC) is accessible across the Institution to facilitate Online search of Books, Digital Resources like DELNET, NDLI, e-Books, e-Journals, NPTEL Lectures, CD and Videos are available in the Library.
- NPTEL Online Certifications are received by Faculty and Students
- Students are provided with Meritorious Scholarship through Muthayammal Educational Trust and Research Foundation (METRF)
- ProCentres for conducting various Programs:
  - Centre for Research and Development

- Centre for Technology Learning
- Centre for Product and Consultancy
- Centre for Quality Assurance
- Centre for Examinations
- Centre for Innovation and Design Thinking
- Centre for Brand Building and Ranking
- > Centre for Academic and Administrative Audit

# FACULTY ACADEMIC EXCELLENCE

- 321 Faculty Members are provided with financial support to attend Conferences / Workshops
- 83 Number of Professional Development /Administrative Training Programmes Organized
- 297 Faculty Members are attended FDP's, Workshop/Seminar during the year
- 93 Guest Lectures delivered by Faculty in other Institutions
- 82 NPTEL Certification by Faculty Members
- 129 Number of Seminars delivered in TASTE by Faculty Members
- 30 Awards and Recognition received by Faculty
- 324 Multi Disciplinary Lectures (MuDiL) delivered by Faculty Members

# **RESEARCH AND CONSULTANCY EXCELLENCE**

The prime focus of the Institution is Academic and Sponsored Research. The Faculty Members engaged in research are provided with seed money by the Institution to start the research and required facilities are provided to carry out research activities. The Department of Electronics and Communication Engineering, Electrical and Electronics Engineering and Mechanical Engineering are recognized as Centres for carrying out Ph.D/M.S.(By Research) Programme by Anna University, Chennai.

#### The main objectives are to,

- > Establish and Nurture Research Culture in the Campus
- > Engage in Collaborative Research with R&D Centres in Reputed Organizations
- > Develop and Establish more Research Centres
- > Encourage more Sponsored Research to Enhance the Research Facilities

Centre for Product Development and Consultancy established to promote the conversion of Ideas into Products, to educate the Students and Faculty members on Product Lifecycle and train the Designers on the feasibility Study of making Products.

#### Major Activities are:

- > Organizing more Programmes on Product Development Life Cycle
- Arranging for Product Survey
- Creating Hardware and Software facilities to develop the New Products
- > Supporting for Patent Search and Patent Filing
- > Consultancy for the Industries based on the need and the Expertise

Consultancy Projects such as IoT and Cloud Based Smart Water Utilization for Agriculture Land Monitoring and Controlling System, Design and Development of Intelligent Motor Starter, Analysis on consumer Attitude towards the usage of organic products and perception on buying organic products in the online Market and Evaluable Hardware Development for Diabetic Retinopathy using Fund us Images are carried out by the Departments

Faculty members are encouraged to apply for funding support from the Government Agencies like AICTE, DST, CSIR, ISRO, DRDO, etc to carryout research work. The Faculty Members of all the Departments shall tie-up with Industries and undertake funded research in emerging and industry relevant areas.

- Provided Rs. 9.55 Lakhs as Seed Money for Research Activities to Faculty Members
- Institution has received a sum of Rs.14.10 Lakhs as Grants
- 70 % of Faculty Members are involved in Research activities
- 3 Departments are recognized as Research Centre by Anna University

- 88 Faculty Members with Ph.D
- 26 Faculty Members are recognized as Research Supervisors
- 140 events related to Research, IPR and Skill Development
- 21 Research Scholars are registered during the year 2021-22
- Published 222 Research Articles in listed Journals
- 261 Articles are indexed in UGC CARE, Scopus and Web of Science
- Published 111 Books /Book Chapters/Conference Proceedings
- 52 Patents Published/Filled/Granted
- Rs. 9.65 Lakhs spent for creating Research Facilities and Technical Training to the Faculty Members for Consultancy Works
- Rs. 7.06 Lakhs generated from Consultancy Works

# SKILL AND CAREER DEVELOPMENT

Training and Placement Cell strives to prepare the students to meet the industry desires. Student Members are actively involved in the Training and Placement activities. Students abilities are shaped through training modules that incorporate Soft Skills, Quantitative Aptitude, Logical Reasoning, Verbal, Technical and Programming Skills.

- 406 offers are received by the Students from various Multinational Companies
- IT and Core Companies like,
  - ➢ Wipro Limited
  - Cognizant Technology Solutions
  - Tata Consultancy Services
  - Techmahindra
  - Softsquare Solutions
  - Acurus Solutions Pvt. Ltd.,
  - ▶ NCR Corporation India Pvt. Ltd.
  - Aspire Systems Technology Solutions
  - Quest Global
  - Sundram Fasteners Limited

- Higher Education Cell provides exposure to Students on pursuing Higher Studies in India and Abroad
- HEC organizes various awareness Programs like, Steps Towards Great Future, Leadership By Responsibility, Higher Studies in UK: Prospects and Possibilities, Passport Awareness Camp, An Overview of Pursuing Higher Studies in the United Kingdom, etc.
- Muthayammal Gate Academy (MuGA) conducts more programs to encourage the students for Graduate Aptitude Test in Engineering (GATE) Exam
- Career Guidance Cell supports Students for various Competitive Examinations by conducting programs like Career Opportunities in UPSC/TNPSC, You are Born to Lead: An Awareness Seminar for Competitive Examinations, etc.
- Entrepreneurship Development Cell organizes activities for the Students to become an Entrepreneur and supports for Startups
- Industry Experts guide the students to excel in idea generation and the incubation of ideas.

## **ALUMNI INTERACTION AND CONTRIBUTION**

Muthayammal Engineering College Alumni Association registered in 2005 (Registration Number 02/2005). The 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. Alumni Meet is organized every year to bring the Alumni's of various Departments to share their experience in multiple domains. About 111 Alumni Interaction Programs are organized for the students in coordination with Training and Placement Cell by the Department.

In addition, Alumni's guide the students in preparing campus interviews in Core and IT Industries. Alumni's are integrated with social media platform which allows the Institution to manage all social media channels via a single point thus maximizing the reach with ease.

#### **EXTENSION AND OUTREACH ACTIVITIES**

National Service Scheme and Youth Red Cross units are functioning in the Institution since 2001.NSS has funded two units and each unit has more than 100 volunteers. As part of the Extension activities, Student volunteers are involved in conducting various activities and Special Camps in the nearby villages. Activities like,

- Awareness on National Voters Day
- Campus Cleaning Awareness
- Tree Plantation
- Rain Water Harvesting
- Dos and Don'ts of social media

Periodical Medical Camps have organized for the public viz.,

- Free Eye Camp
- Novel Corona Virus(2019-nCoV)-Vaccination Camp
- Blood Donation Camp
- Health Check-up Camp

Students are informed about traffic rules and regulations and instill the importance of safeguarding human life. As part of the campaigns, environmentally safe practices such as Plastic Ban, Water Conservation, Waste Segregation, Cleanliness and Anti-Pollution Campaigns are in practice. Youth Red Cross has organized various programs like, Water Day, Drug Abuse, Clean India, Electrical and Fire Safety, etc. Through NSS and YRC the achievers in various fields are invited to provide a motivational talk and they have shared their experience. These series of lectures have made students to positive and to have a responsibility to revert back to the society at their later stages of life.

#### **SPORTS ACTIVITIES**

Students are encouraged to participate in various competitions at the Zonal, Inter-Zonal, State and National Level. Intra and Inter-Collegiate Tournaments are conducted for the Students. Institution provides space for Outdoor Sport activities such as Football, Handball, Ball Badminton, Badminton, Kabaddi, Kho Kho, Volley Ball and Cricket and for Indoor activities such as Chess, Carrom and Table Tennis. Gym facilities are utilized by both Faculty and Students.

## **PROFESSIONAL SOCIETIES, CLUBS AND CELLS**

#### **PROFESSIONAL SOCIETIES**

Programs are organised 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. Professional Societies are as follows,

- 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)

The following Clubs and Cells are organizing periodic programs to make our students to understand the value of being humane.

- Design Thinking Club
- Technoprenuer Club
- Idea/Innovation Club
- Science Club Coding Club
- Drone Club

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- Aspiring Scientist Club
- Helpers Club
- Environmental Club
- Green Energy Club
- Safety Club
- Foreign Language Club
- English Literary Club
- Library Users Club (LUC)
- Science Technology Engineering Maths (STEM) Club
- Marketing Club
- Humanitarian Club
- Psychology Club
- Motivators Club
- Yoga and Meditation Club
- National 5ervice Scheme(NSS)
- Youth Red Cross
- Fine Arts Club
- Painting Tailoring Crafting (PTC ) Club
- Tamil Mandram
- Photography Club
- Walkers Club
- Dance Club
- Cooking Club/ Cookery Club
- Hobby Club
- Health Club

Women Empowerment Cell organizes awareness programs on Gender Equity, Be Safe -Women Safety is Nation Safety, Self Defense, Re-Strengthening of Mind during Pandemic,

Economic Empowerment of Women, etc., for the benefit of Girl Students. Physicians are invited to deliver talk on Health, Nutrition and Women related issues which instil positive impact on health and personal hygiene. International Women's Day is celebrated every year on March 8<sup>th</sup> by conducting competitions and Girl Students are recognized. Web Cultura and Cultura Fest-Intra College Competitions are organized for Students to showcase their talents in Singing, Dancing, Face Painting, Skit, Mime, Photography, Short Film, Mimicry, Mehendi and Hair Dressing events.

#### Yoga and Meditation Club

Faculty Members and Students are motivated to do Yoga exercises regularly to keep them Physically active.MoU is Signed with Vethathiri Maharishi, Aliyar in association with Arivu Thirukovil, Salem. 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.

ENGINEERING COLLEGE THAYAMMAL (AUTONOMOUS) RASIPURAN 37 408, NAMAKKAL Dist. AMIL NADU