



MAR ATHANASIOUS COLLEGE OF ENGINEERING

KOTHAMANGALAM, KERALA, INDIA

GOVERNMENT-AIDED ENGINEERING COLLEGE



ALL PROGRAMS ARE NBA ACCREDITED www.mace.ac.in

WELCOME TO OUR CORNER



OUR VISION

Excellence in education through resource integration

OUR MISSION

The institution is committed to transform itself into a centre of excellence in Technical Education upholding the motto "Knowledge is Power". This is to be achieved by imparting quality education to mould technically competent professionals with moral integrity, ethical values and social commitment, and by promoting innovative activities in the thrust areas emerging from time to time

Mar Athanasius College of Engineering has educated tenacious leaders and inspired our collective future for nearly 60 years. The college manifests a timeless chapter in the lives of its students, piecing together an irreplaceable, transformative experience. **Since 1961**, as a pioneer for engineering education in central Kerala, **MACE**, as it's effortlessly called, has imbued within its student community a sense of enduring curiosity bolstered by a system of unwavering principles deeply rooted in its extraordinary history as the **first engineering institution in Asia under a Christian Management**.

It combines **aiding from the Government of Kerala** with management by the Mar Athanasius College Association to create a fascinating hybrid that houses **six fully fledged departments alongside two auxiliary departments** of Mathematics and Humanities & Science. Celebrated for our pristine quality of education and research, our programmes, distinguished by their depth and diversity, equips students with the tools to realize a highly individualized and rewarding course of study, affiliated to **APJ Abdul Kalam Technological University**. Moreover, it gives us profound delight to be one of very few engineering colleges in the state to offer all programs **accredited by the National Board of Accreditation (NBA), India**.

MACE is at once a space where brilliant academics, strong-willed students and fabulous teachers engage in uplifting pursuits to actualize exciting, impactful ideas. We fervently want for our students to immerse into scholastic life, develop meaningful relationships with professors and advisers, and pursue interests both inside and outside of the classroom, because we believe in enabling well-grounded graduates & postgraduates to thrive in contemporary volatile, uncertain, complex and ambiguous state of affairs, in both professional and domestic spheres, whilst emulating impeccable global standards.

MACE is always more than the sum of its many renowned parts, most of all is home and a place where you belong!

Privileged to be one of the five pioneers in Engineering education in the undergraduate level in Kerala state since 1961, this Government Aided institution is established, owned and managed by the Mar Athanasius College Association. Mar Athanasius College Association is constituted as a Society registered under the Cochin Registration of Literary, Scientific and Charitable Societies Act. The Institution is the second venture of this charitable society, the first being the Mar Athanasius Arts and science college started in 1955. The Association also has Mar Athanasius International School and Mar Baselious College, Adimali, to its credit. The great educational visionary, late Prof. MP Varghese had been at the reins in this victory procession right from the time of founding. There is a Governing body separately for MACE consisting of representatives of Mar Athanasius College Association, All India Council for Technical Education, State Government of Kerala and APJ Abdul Kalam Technological University.

Dr. WINNY VARGHESE





Our college is one among the only three Government Aided Engineering colleges in Kerala. At MACE, we try to nurture the young minds, help them to enrich their knowledge and provide wings to their aspirations, we train them for real life experiences, prepare them to face challenges in life, and encourage them to expose their hidden talents with a view of making them competent and confident to suit any work environment. MACE has always had a penchant for Quality, which is evident from the qualifications and academic contributions of our faculty, placement records, equipments in our laboratories, library and computing facilities, teaching methodology and evaluation system, and the academic level of our students. We have continually excelled in the university examinations over the past 59 years. Our students have excellent placement opportunities, and are employed at the leading companies in India and abroad. We have Alumni chapters in several countries; and our Alumni have brought us glory in the past by serving in key positions in several reputed organizations in India and abroad, and also in the State and Central Government. Though we have earned a place among one of the best rated Engineering colleges in Kerala over these years, we believe that there is always room for improvement.

Dr. MATHEW K

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DISCIPLINE

YEARLY INTAKE

BACHELOR OF TECHNOLOGY (B. Tech.)

	YEAR I ADMISSION	YEAR II ADMISSION	TOTAL
CIVIL ENGINEERING	132	12	144
MECHANICAL ENGINEERING	132	12	144
ELECTRICAL AND ELECTRONICS ENGINEERING	132	12	144
ELECTRONICS AND COMMUNICATION ENGINEERING	132	12	144
COMPUTER SCIENCE AND ENGINEERING	66	6	72
COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)	66	6	72

MASTER OF COMPUTER APPLICATIONS (MCA)

30	6	36
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MASTER OF TECHNOLOGY (M. Tech.)

COMPUTER AIDED STRUCTURAL ENGINEERING	18	-	18
PRODUCTION AND INDUSTRIAL ENGINEERING	18	-	18
POWER ELECTRONICS	18	-	18
STRUCTURAL ENGINEERING AND CONSTRUCTION MANAGEMENT	24	-	24
VLSI AND EMBEDDED SYSTEMS	24	-	24
THERMAL POWER ENGINEERING	24	-	24
COMPUTER SCIENCE AND ENGINEERING	24	-	24

TOTAL

906

COURSES OFFERED

We also offer B. Tech. (Honours) Degree programmes to academically meritorious students, being one of only twelve privileged institutions accorded with the distinct honor.

CIVIL DEPARTMENT

With its vanguard of exceptionally competent, dedicated, proficient, and accomplished faculty, and its full-fledged laboratories augmented with modern machines, this course, since its initiation in 1961, has become irrevocably intriguing for students with a penchant for civil engineering.

LAB RESOURCES

Strength of Materials, Survey, Concrete, Geotechnical, Environmental, Transportation Engineering, and, CAD Laboratories.

MECHANICAL DEPARTMENT

Esteemed as one of the finest in the state from as early as 1961, for its comprehensive, adaptive, and extensive course programme concurrent with excellent infrastructural installations, the department is piloted by elite faculty with Masters and Doctoral degrees from pre-eminent institutions such as the IITs and NITS among others.

LAB RESOURCES

Heat Engines, Hydraulic Machines, Fluid Mechanics, Machine Dynamics, CNC, CADD, CAM, Measurements & Vibration Laboratories; Centre for Biofuel and Renewable Energy Resources, and Centre for Advanced Smart Materials and Structures.



ELECTRICAL AND ELECTRONICS DEPARTMENT

Formed in 1961, the department has a team of adept veteran teachers and technical faculty diligently striving to impart quality education through undergraduate and postgraduate programmes.

Its state-of-the-art laboratories, equipment, and modern software tools stimulate engineering prowess in students priming them to take on global challenges.

ELECTRONICS AND COMMUNICATION DEPARTMENT

Among the first few institutes in Kerala to offer training in this tremendously sophisticated field of engineering, the department has a separate block of its own complete with modern lab amenities tutored by faculty hailing from IITs, NITS, ISc(s), and likewise.

LAB RESOURCES

Electrical Machines, Electrical and Electronics Measurement, Electronic Circuits, Digital Circuits, Power Systems, Power Electronics, Drives and Control, Control and Instrumentation, and Computer Programming Laboratories; and, Electrical and Electronics Engineering Workshop.

LAB RESOURCES

Electronic Circuits/Solid State Electronics, PCB, Digital IC/Linear IC, Microcontroller/DSP, Communication, and Computer Laboratories; and, the Electronics Engineering Workshops.



COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

From being the first to offer a B.Tech. in its respective course under the Mahatma Gandhi University, to setting up a multimedia lab as a joint project with Supercomputer Education and Research Centre, IISc Bangalore, the department has ushered in a new era of software development, research, and consultancy, with several of our engineers working in a gamut of Blue Chip Companies. Continuing this tradition of evolution and embracing the requirements of the industry, a new generation course in the area of Data Science is also offered under this department starting from the year 2020.

COMPUTER APPLICATIONS (MCA) DEPARTMENT

Evincing its mettle-right from those first steps in 1999-for providing brilliant education in computer applications, the department has invariably brought out outstanding results, while encouraging its students to avidly take up real-time projects and consultancy works during their course study. It's also very keen about arranging an assortment of workshops, symposiums, and talks from eminent industry specialists time and time again. A vibrant students association organizes a host of activities for the holistic progress of its student community many of whom later land laudable positions in government, academic, and research centers, alongside IT companies.

LAB RESOURCES

Network Systems, Computer Hardware, Systems Software, Microprocessor, Programming, and Multimedia Database Laboratories.

RESOURCES

Computer Laboratories.



MATHEMATICS DEPARTMENT

Mathematics is the very foundation of engineering and several other fields of study. The programmes aim to provide the students with the analytical, critical, and quantitative reasoning ability to apply advanced mathematical and computational techniques to understand and tackle various real-life problems and technological challenges. Four important topics under engineering mathematics are included in the curriculum as different subjects, each in the first four semesters of all branches of undergraduate engineering courses.

SCIENCE AND HUMANITIES DEPARTMENT

One among the first institutes in the state to provide training and quality education in the field, coupled with sophisticated and modern labs and instruments. It's also ushered by highly qualified faculties hailing from premier institutions of the country.

MACE was at the forefront of research in technology while affiliated with the Mahatma Gandhi University, Kerala and now in tandem with the APJ Abdul Kalam Technological University, we continue digging deeper, pursuing research as a part of the normal academic programme and otherwise, discovering and evolving solutions to problems in engineering and our planet, together.

We've savvy centers of research in Civil Engineering, Mechanical Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering, and Computer Science & Engineering departments, flaunting neoteric laboratories and facilities capable of advanced computational techniques for students actively attempting to understand and solve scientific problems. Besides, on a side note, our concrete research laboratory in the Civil Engineering Department is the first of its kind and hence very unique in Kerala. Students could always take advantage of the astonishing diversity of expertise coming from our dedicated, collaborative, and phenomenally responsive research guides.

The thrust areas of research at MACE are Construction materials, Structural Engineering, Concrete Technology, Transportation, Industrial Engineering, Manufacturing and Metallurgy, Thermal, Medical Image Processing, Data Mining, NDT, Power Electronics, ML, AI, High Voltage Engineering, Nano-Dielectrics etc.



The admissions to first-year B.Tech and MCA courses are based on the ranks obtained in the State Entrance Examinations conducted by the Commissionerate of Entrance Examinations (CEE), Kerala. Admissions to M. Tech aided courses are based on the rank list prepared by the Directorate of Technical Education (DTE), Thiruvananthapuram. For all aforementioned courses, 85% of seats are admitted by the State Government and the remaining 15% of seats are filled by the management based on the ranks obtained in the list published by DTE. Engineering Diploma holders are eligible for admissions to second year B. Tech. based on the entrance test conducted by the DTE. M. Tech. in Computer Aided Structural Engineering and Production & Industrial Engineering are self-financing courses. For both of these courses, 50% of the seats are filled by the management based on the rank list published by the DTE.

PROGRAMME

B. TECH.

M. TECH.

MCA

ELIGIBILITY

+2 Physics, Chemistry, & Mathematics as core subjects with a minimum of 50% of marks in Mathematics.

B. Tech./B. Eng. in appropriate branch of engineering with a minimum of 60% aggregate, or equivalent.

Degree with Mathematics, Computer Science, or Statistics as one of the subjects, and not less than 55% of marks when excluding languages in the qualifying examination.

ADMISSION ELIGIBILITY & PROCEDURE

MACE ALUMNI ASSOCIATION (MACEAA)

Attending MACE is only a beginning, because, after graduating, there remains several opportunities to stay connected with your Alma Matter and your fellow MACEians. All former students, faculty, and final year students constitute the alumni. There are eleven chapters registered in various countries and two inside India. Along with these chapters, there is AMAC, Association of MACE Alumni Chapters, which coordinates activities of various chapters.

Every Alumni is an integral part of MACE and they foster an enduring and meaningful relationship between students of the past and the present, instilling within them a feeling of shared responsibility towards building and maintaining the cherished traditions of the institution. The Alumni Association takes an active interest in the overall development of the college by thoughtfully issuing prizes, scholarships, and monetary assistance for renovation.



MACE Alumni Association has the following chapters:

BANGALORE Chapter
COCHIN Chapter
KUWAIT Chapter
BAHRAIN Chapter
SAUDI ARABIA Chapter
OMAN Chapter
QATAR Chapter
SYDNEY Chapter
MELBOURNE Chapter
BRISBANE Chapter
SEATTLE Chapter
UAE Chapter
UK Chapter

The Parent-Teacher Association (PTA) is envisaged to nurture a close link among the staff, students, and parents, and to invoke that warm feeling of parental care in students. Besides, it also proactively works with the Training and Placement Cell, supports co-curricular & extra-curricular initiatives, and helps with counseling of students on a timely basis. It motivates our students to attain commendable results and provides financial assistance to those in genuine need. A fully-fledged seminar hall, an IT centre, and a formidable gymnasium was made possible with the PTAs contribution as well. It has cooperated with the Alumni Association in the renovation of the college auditorium and is providing financial assistance to all departments of study for various activities and projects.

PARENT TEACHER ASSOCIATION

MACE lies at a sun-licked spot on a low-lying hillock in the mellow town of Kothamangalam, Kerala, one of the most educationally forward states in the country. Spread out over a 66-acre campus, it combines history and charm with all the vigor of an urban setting.

As a college of engineering, the paramount importance conferred on education processes is rather apparent from the well-equipped, impressive classrooms, and seminar/lecture halls. The college is home to extensive laboratories and workshop systems, and each department is host to state-of-the-art teaching facilities. And, each of our departments houses exclusive computer centres and subject-specific libraries in a 24x7 WiFi-enabled environment. Our main library alone shelters 53,000 volumes, 48 national & international journals, and innumerable other resources placed meticulously. The IT infrastructure, with a 24x7 WiFi network connectivity, provides a sustainable platform to broadcast webinars, host NPTEL online classes, and enable students to renew their issued library books remotely in a convenient manner.

Other utilities within campus include:

Indoor stadium(s)	- 1
Football/cricket ground(s)	- 1
Basketball court(s)	- 5
Gymnasium(s)	- 3
Indoor shooting range(s)	- 1
Indoor auditorium(s)	- 1
Badminton court(s)	- 7
Tennis court(s)	- 1
Indoor cricket net(s)	- 2
Guest room(s)	- 4
Volley ball court(s)	- 2
400m athletic track(s)	- 2
Olympic-size swimming pool(s)	- 1
Open-air theater(s)	- 1

With ample support from the Government of Kerala, the Kerala Startup Mission has instituted a Fabrication Laboratory (Fab lab) within campus, that's essentially a technical prototyping platform for innovation & invention which aims at providing stimuli for local entrepreneurship, and serves as a platform for learning and development.



The cell works towards the realization of the goals of quality enhancement, conducting quarterly review meetings, monitoring the department level and college level activities and giving advice and guidelines for the achievement of desired outcome.

IQAC evolves mechanisms and procedures for:

- Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks, Periodical conduct of Academic and Administrative Audit and its follow-up.
- Ensuring the adequacy, maintenance and proper allocation of support structure and services, sharing of research findings and networking with other institutions in India and abroad.
- Facilitating the creation of a learner-centric environment conducive to quality education.
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles.



MACE is an educational & research institution, but not merely so. Our fidelity transcends academic experience because we believe in manifesting a novel setting that stimulates and flaunts technical expertise and charisma. The Training and Placement (TnP) Cell fosters this transformation.

The TnP cell fervently encourages opportunities that matter, be it inspiring and preparing students for competitive examinations of the likes of GATE, GRE, GMAT, CAT, IELTS or TOEFL, while priming a brilliant outlook so that they excel in interactions with would-be employers. It liaises with a gamut of corporate houses and industrial establishments to organize placement & internship drives on par with student aspirations. Before that candidates can participate in aptitude training sessions, take mock tests, partake in group discussions and soft skill improvement programmes, pieced together under the auspices of the cell.

Our TnP cell is continuously in the loop with prospective employers & industrial experts to actively ensure that MACE is both a beckoning and promising hub when it comes to job openings. This has culminated into alumni presence in coveted recruiters from private & government sectors .

We have alumni presence in



The list is incomplete

INNOVATION & ENTREPRENEURSHIP DEVELOPMENT CENTRE

Associated to and funded by the Kerala Startup Mission, Thiruvananthapuram, the IEDC cell at MACE is a powerful beginning backed by the All India Council for Technical Education (AICTE), New Delhi, to mindfully foster techno-entrepreneurship for adding value and employment. Its mission is to develop institutional mechanisms that create an entrepreneurial culture among the stakeholders, and to foster growth entrepreneurship amongst students, faculty, and the society at large! A number of go-getter students from the cell have participated and won several of the innovative project and idea pitching competitions nationally.



GATE/IES COACHING

For GATE and IES aspirants, a coaching center in association with Gateforum has been established, instructing a mix of ardent students from various departments. With awe-inspiring ranks in previous examinations as laurels, more students look forward to taking coaching sessions.

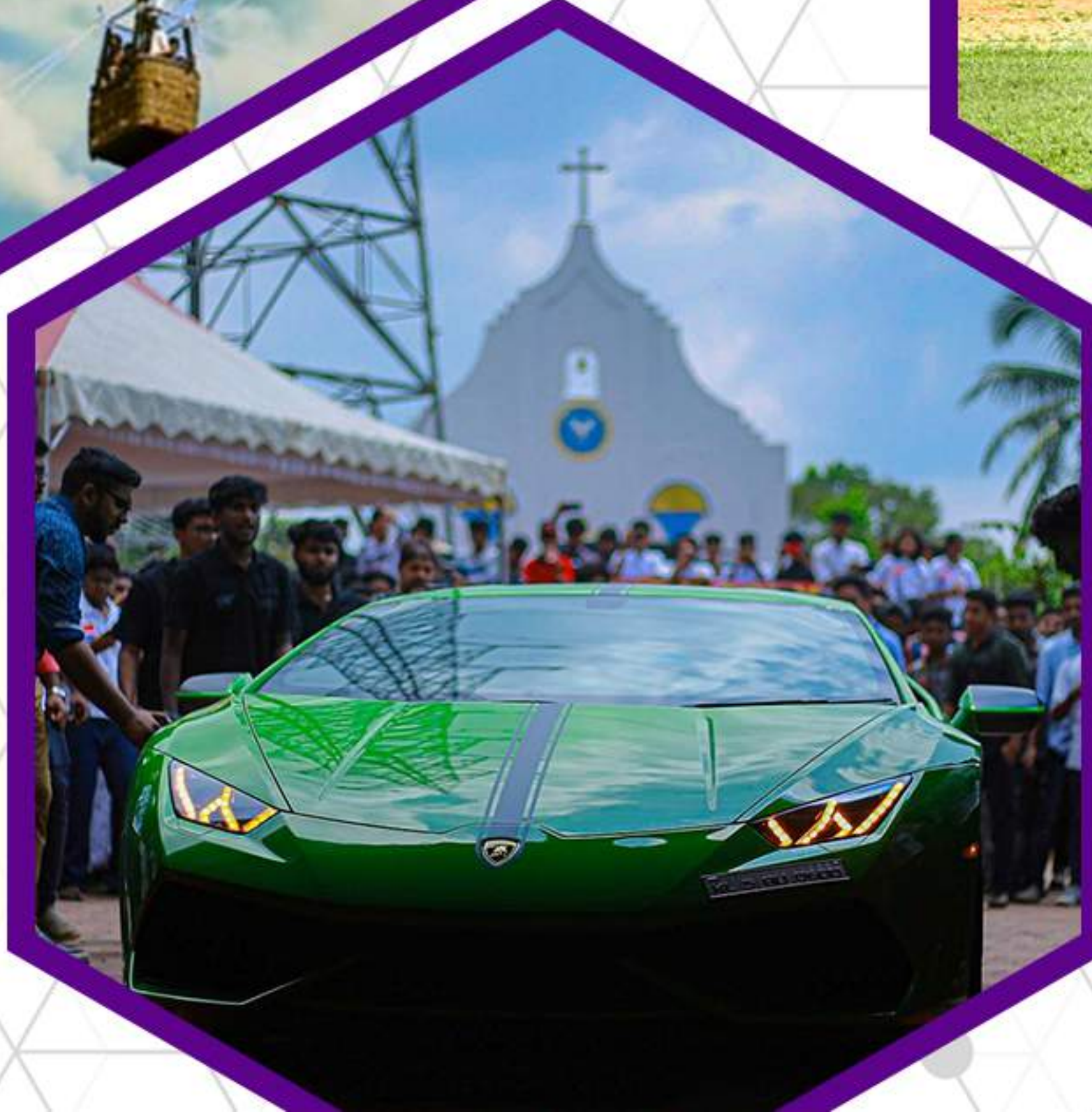


CLUBS, CHAPTERS AND ASSOCIATIONS

IEEE
ISTE
SAE
AISA
ASME MACE
ASPIRE Local Chapter
UN Local Chapter
MUN Local Chapter
THE MACE POST
TEDxMACE
National Service Scheme (NSS)
Sparsham Pain & Palliative Care
Cricket Academy
Sports & Games Association
Fine Arts Club
Audio, Visual and Film Club
Photography Club
Literary and Debating Club
Music Club
Quiz Club
Dance Club
Fashion Club
BPCL Kochi Refinery ENCON Club
Bhoomitra Sena Club
Firefox Club
Horticulture Club
MACE IoT Club
Designers of Mace
Code Chef MACE

About Takshak

Takshak is the annual techfest of Mar Athanasius College of Engineering, Kothamangalam, one among the top range tech fests in South India. With a footfall of more than 20,000 across the span of two days, and an outreach to more than 500 colleges across India, the fest beholds the medley of a vast number of young minds, all together under the same roof. The fest also has a roster of diverse events like workshops, competitions, talks and exhibitions. The entirety of the festival is set to be covered by various forms of media, from radio to web bloggers.



About Sanskriti

A grand stage to exhibit your talents and win a lot of prizes, the annual arts fest of MACE is what that is. The fest lay a platform for many empowerment activities too, with the help of various societies of the college that work towards the same. This has laid a foundation for the development of humanitarianism in the growing generation.



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