

PROGRESS REPORT FOR THE ACADEMIC YEAR 2023-2024
(01 JUNE 2023 TO 31 MAY 2024)

Submitted to



ज्ञान-विज्ञान विमुक्तये

UNIVERSITY GRANTS COMMISSION
Government of India



TKM COLLEGE OF ENGINEERING
(Government Aided and Autonomous)
Kollam 691005, Kerala

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TKM COLLEGE OF ENGINEERING
(GOVERNMENT AIDED AND AUTONOMOUS)
KOLLAM 691005

1. ABOUT THE COLLEGE

TKM College of Engineering, the oldest engineering college in private sector in the state of Kerala, was established in 1958 by Janab Thangal Kunju Musaliar, a reformer, philanthropist and businessman under the aegis of the TKM College Trust, in Kollam district of Kerala. The institution has been a torchbearer for social and technological transformation since its inception and has touched the lives of countless individuals from around the nation, both directly and indirectly. Over a period of six decades, the college produced thousands of brilliant engineers, many of whom are stalwarts in their fields across the globe.

Having started with a humble beginning of 120 students in three basic streams of engineering, the college today stands with the highest intake of 1000 plus students per year in nine UG programs and about 250 students in 10 PG programs. All the departments are approved research centres of APJ Abdul Kalam Technological University and about 100 scholars pursue their doctoral studies in these departments. The college has received funding from TEQIP-II, which was launched in 2012 and the fund utilization is completed in 2023. A total of 12.88 Cr funding was received which was utilized in two phases with 10.05 crore in phase -1 (2012-17) and remaining during the extended period (phase -2 during 2017-23) and TKM College is the only engineering college which became eligible for RUSA funding.

The college has been selected by the AICTE as the "Margadarshan" Institute for mentoring three neighboring institutions, including two engineering colleges and one polytechnic. Additionally, a Technology Business Incubation Centre, named "SEEDS-97" (Startup Enabled Entrepreneurship Development Centre), was established by the 1997 Alumni batch.

The institution today has become a temple of learning and is equated with excellence in technical education having six accredited UG programs and two PG programs by National Board of Accreditation (NBA). Also, the National Assessment and Accreditation Council (NAAC) has accredited the college with A grade. The Institution is governed by the Governing Body under TKM College Trust.

The 57th Governing Body meeting had decided to apply to UGC for autonomous status. The institution was conferred with autonomous status by the UGC on 26th May 2022



VISION:

Excellence In Education and Research with Socio-Economic and Environmental Outlook

MISSION:

- *To Offer State-Of-The-Art Undergraduate, Postgraduate and Doctoral Programmes*
- *To Enhance Knowledge by Engaging in Cutting Edge Research and By Undertaking Collaborative Projects with Industry*
- *To Instill Ethical, Social and Environmental Perspectives in Designing Systems for Sustainable Development*
- *To Nurture Creativity, Self-Learning and Interpersonal Skills*

2. ABOUT AUTONOMOUS STATUS

The institution was conferred with autonomous status by the UGC on 26th May 2022, and the same was formally notified by APJ Abdul Kalam Technological University on 2nd September 2022 (U.O.No. KTU/ASST11(ADMIN)/3212/2022). First Governing Body meeting under autonomous status held on 15th September 2022, Second Governing Body meeting was held on 19th August 2023 and Third Governing Body meeting was held on 12th October 2024.

3. ADMINISTRATIVE ACTIVITIES

The college has the following main administrative bodies:

3.1 Governing Body

Members:

Sri Shahal Hassan Musaliar, Chairman, TKM Trust	Chairman
Sri T.K. Jalaluddin Musaliar, Treasurer, TKM Trust	Member
Sri T.K. Jalaluddin Musaliar, Member, TKM Trust	Member
Sri Khalid H. Musaliar, Member, TKM Trust	Member
Sri Tariq H. Musaliar, Member, TKM Trust	Member
Dr. M. Haroon, Member, TKM Trust	Educationalist/Industrialist
Sri. Ajayan C, Additional Secretary to Government Higher Education (G, J&P), Government of Kerala, Thiruvananthapuram	Nominee of the State Government
Prof Sanjeev G., NSS College of Engineering, Palakkad, Kerala	Nominee of the University



Dr. Ashfak A, Professor, Dept. of Mechanical Engineering	Representing Faculty
Dr. Ajukumar V.N, Associate Professor, Dept. of Mechanical Engineering	Representing Faculty
Dr. Sajeeb R	Principal in-charge

After being conferred with Autonomous status, Governing body meetings were held on the following dates:

- 1st Governing Body meeting – 15/09/2022
 2nd Governing Body meeting – 19/08/2023
 3rd Governing Body meeting – 12/10/2024

3.2 Academic Council

<https://www.tkmce.ac.in/academiccouncil>

Members:

1	Dr. Sajeeb R.	Chairman	Principal
2	<ul style="list-style-type: none"> ▪ Dr. Anu V Thomas (HoD,CE) ▪ Dr. Shafi K.A. (HoD,ME) ▪ Dr. Sheeba R. (HoD,EEE) ▪ Dr. Nishanth N. (HoD,ECE) ▪ Dr. Aneesh G. Nath (HoD,CSE) ▪ Dr. Fazil A. (HoD,CH) ▪ Prof. K. A. Ayyappan (HoD,Arch) ▪ Dr. Fousia M. Shamsudeen (HoD, MCA) ▪ Dr. Rajesh Kumar T.J. (HoD, Maths) ▪ Dr.Habeeb Muhammed M. A. (HoD,Chemistry) ▪ Dr. Shemim S.S (HoD, Physics) ▪ Dr. Manesh Rasheed (HoD, PEd) ▪ Dr. Imthias Ahammed (HoD, Self-Financing) 	Members	All Heads of Departments
3	<ul style="list-style-type: none"> ▪ Dr. Bijuna Kunju K, Professor, Electrical and Electronics Engineering ▪ Dr.Ashfak A., Professor, Mechanical Engineering ▪ Dr.Santhosh Kumar K. G., Associate Professor, Department of Architecture ▪ Dr. Anzar S. M., Assistant Professor, Electronics and Communication Engineering 	Members	Teachers representing different categories of teaching staff
4	<ul style="list-style-type: none"> ▪ Sri S. Kasthuriengan, Professor (Retd), IISC, Bangalore ▪ Sri P.H. Kurian, IAS (Retd) ▪ Dr. Sameer S. M., Dean Academics, NIT Calicut ▪ Sri. Chandra Koduru, VP and Head, India 	Members	External experts/academicians nominated by the Governing Body



	Operations at eClinical Solutions ▪ Dr. K. M. Suceendran, Global Head, TCS Academic Interface Programme ▪ Sri Afsal Musaliar, MD, Supreme Group of Companies ▪ Sri Anwar Musaliar, Programme Manager, Ernst and Young		
5	▪ Dr. Salim A., Professor, Dept of Computer Science and Engineering, GEC Thrissur ▪ Dr. Hari V.S., Professor and Head, Dept of Electronics and Communication Engineering, College of Engineering, Chengannur	Members	Nominees of the University
6	Dr. Nizar Hussain M. (Controller of Examinations)	Member	Dr. Nizar Hussain M. (Controller of Examinations)
7	Dr. Sabeena Beevi K, Head- IQAC	Member Secretary	Faculty member nominated by the Principal

Meetings of the Academic Council were held on the following dates:

- 1st Academic Council meeting – 24/09/2022
- 2nd Academic Council meeting – 27/05/2023
- 3rd Academic Council meeting – 12/06/2023
- 4th Academic Council meeting – 25/01/2024
- 5th Academic Council meeting – 31/06/2024

3.3 Board of Studies

Members:

Civil Engineering Department		
1	Dr. Anu V. Thomas HoD, Civil Engineering Dept.	Chairperson
2	All faculty in Civil Engineering dept	Members
3	Dr. Job Thomas, Professor, School of Civil Engineering, CUSAT	Member
4	Dr. George K. Varghese, Associate Professor, Dept of Civil Engineering, NIT Calicut	Member
5	Dr. Sujatha Manoj, Technical Advisor, Mott MacDonald, Sydney, Australia	Member
6	Mr. K. Sreekumar, Head-Corporate Centre, M/s Larsen &	Member



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Mechanical Engineering Department		
1	Dr. Shafi K. A. HoD, Mechanical Engineering Dept	Chairperson
2	All faculty in Mechanical Engineering dept	Members
3	Dr. Tide P.S , Professor, School of Engineering, CUSAT, Kochi	Member
4	Dr. R. Manu, Professor, Department of Mechanical Engineering , NIT Calicut	Member
5	Sri Ramanathan Krishnan, General Manager, SADA India, Technopark, Trivandrum	Member
6	Prof. Anvar Sadath A. Assistant Professor, College of Engineering, Trivandrum	Member

Electrical and Electronics Engineering department		
1	Dr. Sheeba R. HoD, Electrical and Electronics Engineering dept.	Chairperson
2	All faculty in Electrical and Electronics Engineering dept	Members
3	Dr.Sishaj P. Simon, Associate Professor, NIT Trichy	Member
4	Dr.Shihabudheen K V, Assistant Professor,NIT Calicut	Member
5	Mr.Manu Balakrishnan, System Engineer, Texas	Member
6	Er.Saj Kapoor, Senior Director of Engg., Analog Device	Member
7	Dr. Abdul Nazeer, Professor, Computer Science and Engineering, NIT	Member

Electronics and Communication Engineering Department		
1	Dr. Nishanth N, HoD, Electronics and Communication Engineering dept	Chairperson
2	All faculty in Electronics and Communication Engineering	Members



	dept	
3	Dr.Nithin V.George, Associate Professor,IIT Gandhinagar	Member
4	Dr.Mujeeb,Senior Professor,CUSAT	Member
5	Er.Saj Kapoor, Senior Director of Engg., Analog Device	Member
6	Dr.Gopakumar, IQAC Coordinator, KTU	Member

Computer Science and Engineering Department		
1	Dr. Aneesh G. Nath, HoD, Computer Science and Engineering Dept	Chairperson
2	All faculty in Computer Science and Engineering dept	Members
3	Dr.Murali Krishnan K, Associate Professor,NIT Calicut	Member
4	Dr.John Jose,Associate Professor,IIT Guwahati	Member
5	Bysakh Bhasi,Green Circle Life,USA.	Member
6	Dr.Jasine Babu, Assistant Professor & Head, IIT Palakkad	Member

Chemical Engineering Department		
1	Dr. Fazil A., HoD, Chemical Engineering Dept	Chairperson
2	All faculty in Chemical Engineering dept	Members
3	Dr. T. R. Sreekrishnan, Professor and Deputy Director, IIT Delhi	Member
4	Dr. S. Ramanathan, Professor, IIT Madras	Member
5	Abdul Basith M. S, Plant Operations Manager, Kerala Minerals and Metals Ltd, Chavara, Kollam	Member
6	Reji Joseph, Deputy Manager (Process Engineering), Petrofac International Ltd, UAE	Member

Architecture department



1	Prof. Ayyappan K. A., HoD Architecture Dept	Chairperson
2	All faculty in Architecture dept	Members
3	Dr. Amitava Sarkar, Associate Professor, Department of Architecture, School of Planning and Architecture, Vijayawada, Andhra Pradesh	Member
4	Dr. Arjun Mukherji, Department of Architecture and Regional Planning, IIT Kharagpur	Member
5	Ar. Nithya Srinivasan, InFORM Architects, Bangalore	Member
6	Dr. Bimal P., Assistant Professor, Department of Architecture, NIT Calicut	Member

MCA Department		
1	Prof. Natheera Beevi M., HoD MCA	Chairperson
2	All faculty in MCA dept	Members
3	Dr. Abdul Nazeer K A, Professor, Department of CSE, NIT Calicut	Member
4	Dr. Vinod Chandra SS, Professor, Department of Computer Science, University of Kerala, Kariyavattom Campus	Member
5	Mr. Joy Sebastian, CEO, Techgentsia Software Technologies Private Limited, Infopark Cherthala, Alappuzha	Member
6	Mr. Mohammed Sahad T, Principal Architect, <u>Emerson Automation Solutions</u>	Member

Engineering Science		
1	Dr. Shemim S.S, HoD Physics	Chairperson
2	All faculty in Mathematics, Physics and Chemistry departments	Members
3	Dr. Sunil Jacob John, Professor, Department of Mathematics, NIT Calicut	Member
4	Dr. Maneesh Chandran, Assistant Professor, Department of	Member



	Physics, NIT	
5	Dr. Jobin Cyriac, Associate Professor, Chemistry, IISC, Thiruvananthapuram	Member
6	Dr. Renji R. Reghu, Manager- R&D, Gujarat Polymer Factory, Gujarat	Member

Meetings of the Board of Studies are held by departments once every six months or when required.

3.4 Finance Committee

1	Dr. Sajeeb R, Principal in-charge	Chairman
2	Dr. Veni M Nair Director, TKM Institute of Management	Member
3	Dr. Sadiq A Professor, Department of Mechanical Engineering	Member
4	Mrs. Bindhu M. L. Accounts Officer	Member Secretary

Meetings of the Finance Committee were held on the following dates:

- 1st Finance committee meeting – 28/11/2022
- 2nd Finance Committee meeting – 21/02/2023
- 3rd Finance Committee meeting – 5/10/2024

3.5 IQAC

1	Dr. Sajeeb R, Principal in-charge (Head of the institution)	Chairperson
2	Dr. M. Haroon	Member, TKM College Trust
3	Dr. Shafi K.A., Professor & Head Department of Mechanical Engineering	Vice Principal- Administration
4	Dr. Anu V Thomas, Professor & Head, Dept. of Civil Engg	Teachers of all levels
5	Dr. Adarsh S, Professor. Dept. of Civil Engg.	
6	Prof. Anu Assis, Associate Professor, Dept. of Electronics and Communication Engg.	
7	Prof. Syed Muhammed Fahd, Associate Professor, Dept. of Mechanical Engg	
8	Dr. Anand Shekhar, Assistant Professor, Dept. of Mechanical Engg	
9	Mrs Bindu Shafi, Administrative Assistant	Administrative officers
10	Mr. Afzal A M, Head Accountant	



11	Mr. K Rajan, Executive Member, IEI Kollam Local Centre	Person of local society
12	Mr. Nujum Shiyaz T., SA Lead Kerala, Reliance Communications Ltd.	Employer
13	Mr. Afsal Musaliar. Managing Director, Supreme Group, Kollam	Industrialist
14	Dr. Mathew Skaria, Professor Dept. of Mechanical Engg and Secretary, Alumni Association	Alumnus
15	Vice-Chairman, College Union	Student Representative
16	Dr. Sabeena Beevi K., Associate Professor, Department of Electrical and Electronics Engg.	Coordinator, IQAC

Meetings of the IQAC were held on following dates:

- 1st IQAC meeting – 26/09/2022
- 2nd IQAC meeting – 11/09/2023
- 3rd IQAC meeting - 4/11/2024



4. ACCREDITATION STATUS

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

Existing grade extended to 2027 due to the transition of the college from Affiliated to Autonomous status

Accreditation Status	From	To
A Grade	Nov 2017	Nov 2027

NATIONAL BOARD OF ACCREDITATION (NBA)

Name of Program	Accreditation Status	From	To
B. Tech			
Civil Engineering	6 years Accredited	2016	2022
Mechanical Engineering	6 years Accredited	2016	2022
Electrical & Electronics Engineering	3 years Accredited (Re accredited)	2019	2025
Electronics & Communication Engineering	3 years Accredited (Re accredited)	2019	2025
Computer Science & Engineering	3 years Accredited (Re accredited)	2019	2025
Chemical Engineering	3 years Accredited (Re accredited)	2022	2025
M.Tech			
Structural Engineering and Construction Management	3 years Accredited	2019	2022
Industrial Refrigeration and Cryogenics	3 years Accredited	2019	2022

ACCREDITATION APPLICATION STATUS

NATIONAL BOARD OF ACCREDITATION (NBA)

Name of Program	Self-Assessment Report (SAR) Submission	Peer Team Visit Conducted	Outcome
B. Tech			
Civil Engineering	Submitted on September 30 th 2024	8 th Nov to 10 th 2024	Result Awaiting
Mechanical Engineering	Submitted on September 30 th 2024	8 th Nov to 10 th 2024	Result Awaiting



5. ACHIEVEMENTS

(i) AICTE Margdarshan Scheme

The college has been selected by the AICTE as the "Margadarshan" Institute for mentoring three neighboring institutions, including two engineering colleges and one polytechnic. It improves the quality of technical education as a whole through accreditation by providing access to the facilities available in host institute, spread awareness about various initiative of AICTE and also provide guidance and support for achieving better NIRF ranking.

Overall, the Margdarshan Scheme will serve as a comprehensive framework for institutional development and accreditation enhancement in higher education. The institution is allotted with a grant-in-aid of Rs. 9,00,000/- under this Scheme.

The list of Mentor Beneficiary Institute as approved by the Council are:

A	MES Institute of Technology and Management Chathannoor, Kollam
B	Valia Koonambayikulathamma College of Engineering and Technology Chavarcode, Parippally, Kollam
C	Sree Narayana Polytechnic College, Kottiyam, Kollam

6. ACADEMIC ACTIVITIES

(i) Programs & Student Intake

Program	2023 - 2024
UG PROGRAMS	
Civil Engineering	137
Mechanical Engineering	203
Electrical & Electronics Engg.	138
Electrical & Computer Engg.	63
Electronics & Communication Engg	147
Computer Science & Engineering	146
Chemical Engineering	69
B. Arch	79
PG PROGRAMS	
Structural Engineering and Construction Management	18
Transportation Engineering	18
Industrial Refrigeration and Cryogenics	2
Communication Systems	11



Computer Science Engineering	17
Urban Planning	7
Artificial Intelligence	16
Industrial Safety & Engineering	14
MCA	60
Power Systems	5
Industrial Instrumentation & Control	13

Academic results (UG)

Graduating Year	Students Registered	Students Passed	% Pass
2024	904	729	80.64

(ii) Program-wise result (2023-24)

Pass Percentage

Branch	Pass Percentage
Civil Engineering	74.29
Mechanical Engineering	74.88
Computer Science & Engineering	85.92
Electrical & Electronics Engineering	79.26
Electronics & Communication Engineering	92.7
Chemical Engineering	76.90
Architecture	84.28

Honors & Minors (2022-23)

Honours/Minor	No of Students
Honours Degree	79
Minors	101



(iii) Curriculum Design and Development

The TKM College of Engineering is pleased to announce the launch of its new B.Tech, B. Arch and postgraduate MCA curriculum, aiming at a comprehensive and rigorous education in a holistic approach.

B. Tech

The new undergraduate curriculum of TKM College of Engineering is designed to provide students with the skills and knowledge they need to become competent engineers capable of tackling real-world problems in a variety of fields. The curriculum is carefully designed to expose students to both theoretical and practical aspects of engineering and provide them with hands-on experience in the latest technologies and tools used in the industry. The courses given in the curriculum are tailored in a student centric fashion to ensure that they receive well-rounded education with the flexibility to customize their own learning experience according to their interests and career goals. The allocation of 163 credits, of which 160 are from courses and 3 from activity points, over a period of four years, with each year comprising of two semesters. All courses in the curriculum are designed to highlight the significance of applying knowledge to engineering and technology challenges, fostering creativity and innovation, and developing entrepreneurial abilities. The curriculum includes project-based courses that emphasize hands-on learning and real-world applications supported by the fundamentals of engineering. These courses are offered with lab components, which allow students to gain practical experience in applying the concepts they have learned. Additionally, there are basic science courses with lab components, core courses without practical components, 4- hour lab courses, as well as 1/2-hour theory courses and 2-hour lab courses to provide breadth wise knowledge in the area of recent technological trends. These variety of courses ensures that students receive a well-rounded education and have the flexibility to customize their own learning experience according to their interests and career goals. In addition to these core subjects, students will have the opportunity to choose from a wide range of elective courses in specialized areas.

The industry internship included in the curriculum will give students the opportunity to apply their theoretical knowledge to practical situations and gain valuable experience. The students can opt for MOOC courses corresponding to Professional Elective and Open Elective Courses during their 8th semester, which will give them flexibility in doing internships. Moreover, the extracurricular activities that students can participate in to earn activity points will provide them with a well-versed education and help them develop important skills such as leadership, teamwork, and communication. This is a great initiative by TKM College of Engineering to ensure that students not only excel academically but also develop important life skills that will help them in their future careers.

B. Arch

The new curriculum aims to promote a comprehensive and rigorous education that focuses on knowledge, skills and values that are consistent with the science and application of the discipline of architecture. Efforts are made to foresee the future



expectations from Architecture education to meet the upcoming challenges adhering to the Council of Architecture Minimum Standards of Architecture Education 2020 and NEP 2020 guidelines. The Curriculum aims to expose students to the theoretical and practical aspects of the discipline, and provide them with an experience of the latest technologies and tools used in the industry. At the core of this curriculum lies a strong emphasis on architectural design, the history and theory of architecture, building science and technology, and professional practice. These foundational elements are carefully integrated with emerging areas such as sustainable design, digital technologies, and interdisciplinary collaboration to provide students with a holistic understanding of architecture in the contemporary world.

The curriculum is structured in a progressive manner, allowing students to develop their skills and knowledge incrementally over the course of their undergraduate studies. Studio-based learning forms the backbone of the program, enabling students to engage in hands-on design exercises, problem-solving, and critical thinking. The integration of advanced technologies, such as computer-aided design (CAD) software, building information modeling (BIM), and sustainable design tools, ensures that graduates are well prepared to navigate the complexities of the modern architectural profession. Moreover, this curriculum recognizes the significance of ethical considerations, professional responsibilities, and leadership development. It encourages students to reflect on the social and ethical implications of their design decisions, fostering a sense of responsibility towards the well-being of individuals and communities. Additionally, opportunities for professional internships and research experiences enable students to gain real-world exposure and contribute to the advancement of the field. As we embark on this educational journey, we are committed to nurturing a new generation of architects who will shape a sustainable, inclusive, and inspiring built environment for generations to come. The rules and regulations stated here shall be called the TKM College of Engineering (Aided and Autonomous) academic regulations for B. Arch program, 2023. The regulations will be applicable to students admitted to the B. Arch program of TKM College of Engineering (Aided and Autonomous) from 2023 admission onwards. The Academic Council of TKM College of Engineering shall decide curriculum of the program under this regulation.

MCA

The TKM College of Engineering is pleased to announce the launch of its new postgraduate MCA curriculum, aiming at a comprehensive and rigorous education in computer application and technology, a holistic approach. The curriculum has been carefully designed to provide our students with the skills and knowledge needed to become competent professionals capable of tackling real-world problems in a variety of fields. The curriculum has a total of 87 credits, spread over a period of two years, with each year comprising two semesters. The curriculum is designed to expose students to both theoretical and practical aspects and provide them with hands-on experience in the latest technologies and tools used in the industry. The project-based courses that emphasize hands-on learning and real-world applications supported by the fundamentals of computer application is the core of



this curriculum. These courses are offered with lab components, which allow students to gain practical experience in applying the concepts they have learned. In addition, there are courses which include core courses and mathematical courses with lab components, core courses without practical components, 2-hour theory courses, as well as 1-hour theory courses and 2- hour lab courses. This variety of courses ensures that students receive well rounded education and have the flexibility to customize their own learning experience according to their interests and career goals. In addition to these core subjects, students will have the opportunity to choose from a wide range of elective courses in specialized areas. The students can opt for MOOC courses corresponding to Elective Courses, which will give them flexibility in doing internships during their 3rd semester as part of a mini project.

An industry internship/research project is also included in the curriculum in 4th semester, giving students the opportunity to apply their theoretical knowledge to socially relevant real-world problems and gain valuable practical 6 experience. The internship will also assist students in developing professional skills and expanding their industry network.

In addition to the academic curriculum, students should also participate in various extracurricular activities such as sports, cultural events, community service, and entrepreneurship. These activities will help students develop their leadership, teamwork, and communication skills, and provide them with a well-rounded education.

(iv) Students Achievements

Civil Department

- Beema Jihan of Civil Engineering department won the first rank among all branches in the APJAKTU B. Tech examination 2024 (2020-2024 batch) with a CGPA of 9.97.
- In Architecture results of APJKTU (2019-2024 batch), Maria Joy has secured 1st Rank and Anjali Murali secured 2nd rank.
- Aswathy E of Electronics Department secured 3rd Rank among all branches in APJKTU 2024 and 2nd Rank in ECE
- Fathima Fazal of Civil Department achieved 3rd position in Civil Engineering in APJAKTU with a CGPA of 9.87.
- 7 UG Students of Civil 2021-25 batch presented papers in EGU 2024 (April 2024).

Mechanical Department

- Mechanical Department Secured All India 2nd rank in National Level Competition on Computational Fluid Dynamics (CFD) using ANSYS Fluent held at SRM Institute of Technology, Chennai
- Mechanical Department Secured All India 3rd rank in the competition for their innovative approaches to both innovation and 3D modelling of Electric Two-Wheeler Design held at Rajalekshmi Engineering College in Chennai.



- Mechanical Department Secured 1st place in Best Innovative Design for DRONA-Autonomous Drone Development Competition (ADDC) held at KCG College of Engineering.
- Mechanical Department Secured All Kerala 4th rank for DRONA-Autonomous Drone Development Competition (ADDC) held at KCG College of Engineering.

Electrical Department

- 30 Students of Electrical Department 2024 Pass out batch placed in L&T
- Anjala Santhosh Parveen from Electrical Department got admission in IIM Raipur
- Kasyap R Narayan from Electrical Department got selected for PG with Build India Scholarship provided by L&T for higher studies in NIT Surathkal
- Final year students Hiba, Sandra and Nithin from Electrical Department, won first prize for Poster presentation competition held at TKM College of Engineering, Kollam.

Electronics Department

- Kezia Susan Mathew of Electronics Department secured KTU 4th Rank
- Vinay Arun Kumar secured Highest CTC - 12.62 LPA -Amadeus
- Joel V Joshi, Divyasree J, Gokul Manoj secured Placed in Navaratna Bel with CTC 12 LPA
- Bhadra JR from Electronics Department was Selected for the Women in Tech program by NXP Semiconductors, she is shortlisted from more than 8500 applications based on test and interview conducted by NXP Semiconductor.
- Sreehari B, Derin Jhon Antony, Vinu Madav from Electronics Department secured 1st in All India Rank for Drona - Best innovations award under SAE
- Seed Variety Detection and Fertilizer Planning - Project Proposal Selected for Analog Devices Anveshan 2024 fellowship program done by Dixon Mathew, Bhadra JR, Neeta Sara Reji, Devanandan H of Electronics Department.
- Automated Tea Plant Disease Detection Using Deep Learning - Project Proposal Selected for Analog Devices Anveshan 2024 a fellowship program done by Aditya, Ashwin, Beema, Haroshin and Jais Jomy of Electronics Department.
- Enhancing Electronics education through augmented reality and automated circuit verification: A comprehensive workflow design done by Aswin A of Electronics Department has been accepted for prestigious TALE 2024 conference.
- Abhijith K, Akhilesh S, Mohammed Anas M, Muhammed Salman Farizi of Electronics Department designed & fabricated a Chip for arrythmia detection - First chip fabricated by TKMCE.
- Abhijith U won Second prize in Google Developer Student Club WOW Hackathon.
- A Paper by Sri. Aswin was accepted for presentation in prestigious TALE 2024 conference, IEEE education Society's flagship Asia-Pacific conference - Electronics Department.



Computer Science Department

- Two students of the Computer Science Department Neeraj S D and Deepak P, of S7 CSE, were placed in COMMVault, with an LPA of 34 Lakhs.
- TKMCE students of Computer Science Department jointly with IIT Madras researchers have developed a new type of Generative Adversarial Network called SketchCADGAN to retrieve 3D CAD models.
- Research work of Computer Science Department "SketchCADGAN: A generative approach for completing partially drawn query sketches of engineering shapes to enhance retrieval system performance." got accepted in the International Conference 3DOR 2023 and published in Computers and Graphics Journal (Elsevier).

Chemical Engineering Department

- Mr. Ajith P. Mangottil (2019-23 Batch Chemical Engineering) received GB Panikker gold Medal Award by IChE Trivandrum Region for topper in Chemical Engineering, APAKTU.
- Architecture Secured 3rd position in the KTU BArch examination with a total pass percentage of 84.28%.

Architecture Department

- Architecture students won Zonal NASA Convention at DC School of Architecture and Design, Vagamon from 3rd to 5th Nov, 2023, attended by 52 students of S3 and S5 B. Arch batches
- Vinayak Venugopal & Mariya Joe of Architecture Department won First Runner Up ENVISAGE 2023.

Artificial Intelligence Department

- Hari Prasad Of AI Department Achieved first prize winning 3000 USD in the IEEE global student hackathon on Trusted and Secure Learning Systems with the project "Federated Online Synchronous Facial Recognition and Authentication (FOSFRA)," among 10 finalists worldwide, chosen from hundreds of global applications.
- Hari Prasad of AI Department got Selected as of the top 10 fellows globally for the Pi School of AI 2-month fellowship 2023 program, organized in Rome, Italy, receiving a 100% scholarship.

7. RESEARCH ACTIVITIES

(i) Funded Projects

Sl. No.	Name of faculty	Name of Agency	Project Title	Amount (Rs.)
1	Dr. Habeeb Muhammed M A	TEQIP-II/Four funds	Development of metal nanocluster-based hybrids for sensing and	50,000



			bio applications	
2	Dr. Habeeb Muhammed M A	TEQIP-II/Four funds- student project	Fabrication of Metal Nanocluster Based Hybrids	20,000
3	Dr. Adrash S.	DST-WISE	Regional hazard mapping of Western Ghats of Kerala, India accounting the temporal probability of rainfall	20,21,000
4	Dr. Adrash S.	AICTE	Amrut internship project	2,00,000
5	Dr. Shyna A	CERD	Implementation of Methods to Improve Cerebral Blood Flow Quantification in Arterial Spin Labeling MRI to Aid Clinical Diagnosis in Human Brain. (Continuing)	2,00,000
6	Dr. Aneesh G Nath	CERD	Development of Artificial Intelligence based Machinery Fault Diagnosis System using Thermal Images (Continuing)	2,00,000
7	Dr. Jini Raju	CERD	Novel approaches to the estimation of IVIM parameters to aid clinical diagnosis (Continuing)	2,00,000
8	Sajeena A, Anu Assis, Vishnu D	IEEE CASS Kerala & IEEE CASS TKMSB	SDR based RF transmitter for aerospace application	28784
9	Sajeena A, Anu Assis, Vishnu D	IEEE CASS Kerala & IEEE CASS TKMSB	Integrated vehicle health management system using PIC and FPGA	30000
10	Sajeena A, Anu Assis, Vishnu D	IEEE CASS Kerala & IEEE CASS TKMSB	Federated learning in consumer electronics	10000



11	Dr. Muhammed Mansoor O	Centre of Excellence for Disability studies	Development and Implementation of solar powered hybrid electric tri wheeler for differently abled people based on user requirements	228500
12	Dr. Reby Roy K. E. and Dr. Rijo Jacob Thomas	DST	FIST program to strengthen the research facilities in the Department	69,00,000
13	TKM College of Engineering	RUSA		1,50,00,000
TOTAL				2,51,88,284

(ii) Publications

Department	SCI/ Scopus Indexed	Conference	Total
Architecture	0	4	4
Civil	33	58	91
Chemical	0	1	1
Chemistry	3	0	3
Computer Science and Engineering	21	16	37
ECE	4	39	43
EEE	16	22	30
Maths	5	0	5
Mechanical	23	5	8
Architecture	0	4	4

Publication Type	2023-24
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Indexed Journals (SCI & Scopus)	110
Conference proceedings	152

(iii) Institute-Industry Collaborations and Relations

Mechanical Engineering Department

No	MOU with Institutions
1.	Daffo Tech Innovations LLP Trivandrum-695028, Kerala, India.
2.	Research and development of CFD studies on the Fire Safety and ventilation requirements at the renovated domestic terminal of Thiruvananthapuram Airport.
3.	3D CFD modelling and Analysis of the Airflow and Thermal Humidity Mapping in cold room with stack

Electrical & Electronics Engineering Department

No	MOU with Institutions
1.	Digi Toad Technologies, Bangalore (Dr. T A Shahul Hameed, Dr. Sabeena Beevi K) (Mr. Rohit Prajapathi, Director of Digi Toad Technologies, 27/03/2024)
2.	PhiScape Robotics Pvt. Ltd, Kollam (Dr. T A Shahul Hameed, Dr. Sheeba R) (Mr. Muhammed Salmun S, CEO of PhiScape, Mr. Maanas Manoj, CAO of PhiScape, Anitha Rhakrishnan, COO OF PhiScape, 27/05/2024)

Electronics & Communication Engineering Department

No	MOU with Institutions
1.	Digital University Kerala
2.	CDAC Trivandrum
3.	Tata Elxi
4.	Curvelogics Advanced Technology Solutions Pvt Ltd
5.	TKM Centenary public school
6.	H R Universal
7.	Hie Capital



Computer Science & Engineering Department

No	MOU with Institutions
1.	Centre for Innovation, IIT Madras (Dr. Prabhu Rajagopal- Head, CFI and Advisor) (Internship, Placement Training, Research & Development, 05-04-2023_05-04-2028)
2.	DCUBE AI Systems and Services Pvt. Ltd (Manu Madhavan- Chief Operating Officer) (Internship, Placement-01-02-2023_ Till Date)
3.	Reflections Info Systems Pvt. Ltd (Deepa Sarojammal- CEO) (Internship, Placement-01-02-2023_01-02-2024)

Master Of Computer Application

No	MOU with Institutions
1.	SOLVILOR TECHNOLOGIES PVT Ltd, Bangalore on 15/04/2024

Artificial Intelligence

No	MOU with Institutions
1.	Alshifa College of Arts and Science to conduct certificate course in Machine Learning.

(iv) Research Facilities

1. Biomedical Engineering Research Lab – Department of Electronics And Communication Engineering

The Biomedical Engineering Research Lab in Department of Electronics and Communication Engineering (ECE) at TKM College of Engineering was formally inaugurated on April 19th 2024 by the Honourable Chairman TKM College Trust Janab Shahal Hassan Musaliar in the presence of TKM Trust treasurer Janab Jalaluddin Musaliar and other trust members. This cutting-edge lab represents a fusion of engineering and medical sciences, aimed at addressing some of the most pressing healthcare challenges. Partly sponsored by Emerald Group of Companies (Abu Dhabi, UAE), the lab will pioneer research in biomedical devices and AI driven diagnostics. The goal is to foster innovation in healthcare technologies through collaboration between academia and industry. Four research scholars registered under APJ Abdul Kalam Technological University are pursuing research in the lab. Various UG and PG student projects are also being undertaken in the lab.



Key Research Areas & Projects

The lab is currently focused on several high-impact biomedical engineering projects. These projects aim to leverage artificial intelligence (AI), signal processing, and rehabilitation technologies to improve diagnostic accuracy and treatment efficacy. Here are the key projects being developed:

- AI-Based Diagnosis of Neuro-degenerative disorders
- EMG-Based Hand Gesture Recognition
- Adaptive Virtual Reality System for Balance Training
- Heart Rhythm Analyzer for Arrhythmia Detection
- Neuromuscular Electrical Stimulation for rehabilitation
- RF imaging for medical diagnostics Collaborations

Collaboration

- PG projects with IIT-Palakkad.
- MoU with National Institute for Speech & Hearing Impaired (NISH) is under discussion
- Collaboration with Travancore Medical College Hospital, Kollam is under discussion
- Seeking opportunities for foreign collaborations
- Designed and taped out a chip for Arrhythmia Detection, the first of its kind from the institution.
- Two conference publications
- Multiple research articles under review in reputed journals

2. The Geoinformatics Research Laboratory

The Geoinformatics Research Laboratory was inaugurated by the honorable treasurer of TKM Trust, Janab T.K. Jalaluddin Musaliar, on 13th May 2024. It is a joint venture by the Department of Civil Engineering and the Department of Architecture catering as an interdisciplinary hub for joint interactions and research works. The systems are fully equipped with purchased version of ArcGIS 10.8, a geospatial software to view, edit, manage, analyze geographic data and patterns and to generate maps. There are other software like HECRAS, HECHMS, HECSSP, R-studio, QGIS and Google Earth pro installed in the systems.

3. Embedded Systems Lab at Department of Electrical and Electronics Engineering

Recognizing the need for hands-on training to mold our students into industry-ready engineers, the Electrical and Electronics Engineering department has set up a brand-new embedded systems laboratory for the students. This facility is headed by Dr Sabeena Beevi K, the then HoD with operations overseen by Mr Rejimon.

Equipped with cutting edge technology on both sides, hardware and software, the



lab boasts a huge collection of STM32 microcontrollers and a vast array of sensors of different kinds and applications. **The systems are equipped with the latest version of STM32 cube IDE and nano edge AI, a platform used by reputed firms to train their systems with Machine Learning models.** The lab is well equipped and furnished with air conditioning, uninterrupted power supply and well cushioned chairs ensuring the students comfort, while pursuing their dreams in the fields of Embedded systems and Machine learning.

(v) Collaborative/Interdisciplinary Research Works and other Projects

Research Supervisors & Scholars

Number of Research Supervisors	48
No. of scholars joined during 2023-24	25
Total No. of Ph.D. scholars	136
PhDs awarded during 2023-24	10

Patent

Status	Upto 2022	2022-23	2023-24
Filed	5	1	1
Published	5	4	2
Granted	2	2	5

Details of PhDs awarded during 2023-24

Ph.D. scholars	Research Supervisors	Title
Divya S	L Padma Suresh (Ktu-F29750) Ansamma John (Ktu-F2095)	A Hybrid Optimization Approach for Classification and Prediction of Brain Tumor Magnetic Resonance Images



Shyna A	Dr. Usha Devi Amma C and Dr. Ansamma John.	Implementation of methods to improve cerebral blood flow quantification in arterial spin labeling MRI to aid clinical diagnosis in human brain
Thushara A	Dr. Usha Devi Amma C and Dr. Ansamma John.	Predicting the risk of Alzheimer's disease using magnetic resonance imaging
Jini Raju	Dr. Usha Devi Amma C and Dr. Ansamma John.	Novel Approaches to the Estimation of IVIM Parameters to aid clinical diagnosis
Resmi S.L	Dr. Dileep P.N	Investigation on the mechanical behavior of implanted femur bone.
Ashok K.B	Dr. Rijo Jacob Thomas	Investigation on the fine tuning of different performance parameters of high temperature superconductors.
Shajan S	Dr. Baiju V	Numerical and experimental investigation on performance improvements of parabolic trough solar thermal collector for medium temperature applications.
Asif Sha A	Dr. Baiju V	Thermodynamic modelling and experimental investigation of two bed solar vapor adsorption cooling system.

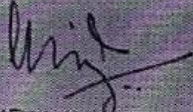
Consultancy

Year	Amount (Rs.)
2023-24	82,97,062



8. FINANCIAL REPORT

TKM COLLEGE OF ENGINEERING ,KOLLAM-5 FINANCIAL DATA FOR THE FINANCIAL YEAR 2023-24	
EXPENDITURE	
Budget Group	Actual 2023-24
Infrastructure Developments	24,26,196
Academic Initiative & Developments	6,95,18,278
Research & Developments	87,03,434
General Administration	2,32,18,584
Students Support Schemes	2,00,26,939
Examinations	57,33,844
Institute Social Responsibility	3,76,720
Co-curricular & extra curricular activities	47,28,104
Salary & Allowance	47,98,55,151
Total	61,45,87,250
RECEIPTS	
Receipt from Govt (Salary & Others)	50,44,19,959
Govt Sponsored Projects	23,50,463
Consultancy/Testing fee	57,52,144
Alumni Association	5,20,000
PTA	61,67,633
Fee from students	7,56,24,075
CGPU	14,00,000
Other receipts	5,98,640
Trust Fund for Academics & Research	2,41,42,775
Total	62,09,75,689


PRINCIPAL IN CHARGE
THANGAL KUNJU MUSALIAR
COLLEGE OF ENGINEERING
KOLLAM - 691 005



9. EXAMINATION REPORT

The January – March 2024 examination season included eighteen examinations, involving 135 courses including supplementary examinations. A dedicated group of faculty members were involved in the pre-examination, examination and post examination phases. The pre-examination process included preparation of question bank, followed by scrutiny, the examination process includes question paper printing, invigilation and squad duty. The post examination process includes valuation of answer scripts, tabulation and publication of results.

A total of 236 faculty members contributed towards preparation of the question bank in the QnSmarti Portal. The system generated question papers were scrutinized in an extensive scrutiny process which involved 158 scrutiny members 54 external and 104 internal members and spanned over two months.

The examinations were conducted seamlessly during the period from 09.01.2024 to 20.03.2024 as per the published timetable. The valuation process was completed in the stipulated time and results were published in record time. A summary of the results of regular examinations of various semesters are summarized below.

Name of Exam	Branch	Pass Percentage
Ph. D Odd Semester Exam, January 2024	Civil Engineering	100
	Computer Application	100
	Mechanical Engineering	100
S3 (R) M. Tech Exam, January 2024	Structural Engineering and Construction Management	100
	Transportation Engineering	100
	Computer Science & Engineering	100
	Communication Systems	100
	Industrial Instrumentation and Control	100
	Power System	100
	Industrial Refrigeration and Cryogenic	100
	Computer Integrated Manufacturing	100
	Artificial Intelligence	100
	Industrial Safety and Engineering	100
S3 (R) M. Plan Exam, January 2024	M.Plan	100
S3 (R) MCA Exam, January 2024	MCA	95
S3 (R) B. Tech Exam, January	Civil Engineering	75.7



2024	Computer Science and Engineering	81.5
	Chemical Engineering	71.4
	Electrical and Electronics Engineering	62.2
	Electronics and Communication Engineering	78.9
	Electrical and Computer Engineering	82.5
	Mechanical Engineering	71.5
S3 (R) B. Tech Minor Exam, January 2024	Civil Engineering	87.5
	Computer Science and Engineering	100
	Chemical Engineering	94.6
	Electrical and Electronics Engineering	83.3
	Electronics and Communication Engineering	95.2
	Electrical and Computer Engineering	100
S1 (R) B. Arch Exam, January 2024	B. Arch	87.2
S1 (R) B. Tech Exam, January 2024	Civil Engineering	86
	Computer Science and Engineering	95.2
	Chemical Engineering	88.4
	Electrical and Electronics Engineering	89.8
	Electronics and Communication Engineering	94.5
	Electrical and Computer Engineering	93.7
	Mechanical Engineering	86.2
S1 (R) M. Plan Exam, January 2024	M. Plan	100
S1 (R) MCA Exam, January 2024	MCA	100
S1(R,S) M. Tech Exam January 2024	Structural Engineering and Construction Management	100
	Transportation Engineering	94.1
	Computer Science & Engineering	94.1
	Communication Systems	100
	Industrial Instrumentation and Control	92.3
	Power System	80



	Industrial Refrigeration and Cryogenic	100
	Artificial Intelligence	100
	Industrial Safety and Engineering	100

The May–July 2024 examination season included twenty-three exam definitions, involving 180 courses including supplementary examinations. A dedicated group of faculty members were involved in the pre-examination, examination and post examination phases. The pre-examination process included preparation of question bank, followed by scrutiny, the examination process includes question paper printing, invigilation and squad duty. The post examination process includes valuation of answer scripts, tabulation and publication of results.

A total of 206 faculty members contributed towards preparation of the question bank in the QnSmarti Portal. The system generated question papers were scrutinized in an extensive scrutiny process which involved 233 scrutiny members 92 external and 141 internal members and spanned over two months.

The examinations were conducted seamlessly during the period from 06.05.2024 to 19.07.2024 as per the published timetable. The valuation process was completed in the stipulated time and results were published in record time. A summary of the results of regular examinations of various semesters are summarized below.

Name of Exam	Branch	Pass Percentage
Ph. D Even Semester Exam, May 2024	Civil Engineering	100
	Computer Application	100
	Computer Science and Engineering	100
	Electrical and Electronics Engineering	75
	Electronics and Communication Engineering	100
	Mechanical Engineering	100
S4 (R) M. Tech Exam, June 2024	Structural Engineering and Construction Management	100
	Transportation Engineering	100
	Computer Science & Engineering	100
	Communication Systems	100
	Industrial Instrumentation and Control	100
	Power System	100
	Industrial Refrigeration and Cryogenic	100
	Computer Integrated Manufacturing	100
	Artificial Intelligence	100



	Industrial Safety and Engineering	100
S4 (R) M. Plan Exam, May 2024	M.Plan	100
S4 (R) MCA Exam, May 2024	MCA	100
S4 (R) B. Tech Exam, May 2024	Civil Engineering	77.7
	Computer Science and Engineering	77.5
	Chemical Engineering	72.5
	Electrical and Electronics Engineering	59.2
	Electronics and Communication Engineering	67.8
	Electrical and Computer Engineering	82.3
	Mechanical Engineering	64.7
S4 (R) B. Tech Minor Exam, June 2024	Civil Engineering	85.2
	Computer Science and Engineering	100
	Chemical Engineering	85.3
	Electrical and Electronics Engineering	92.6
	Electronics and Communication Engineering	90.8
	Electrical and Computer Engineering	100
	Mechanical Engineering	84.6
S4 (R) B. Tech Honours Exam, June 2024	Civil Engineering	100
	Computer Science and Engineering	98.8
	Chemical Engineering	78.6
	Electrical and Electronics Engineering	90.9
	Electronics and Communication Engineering	79.2
	Electrical and Computer Engineering	91.7
	Mechanical Engineering	63.6
S4 (R) B. Arch Exam, May 2024	B. Arch	92
S2 (R) B. Tech Exam, May 2024	Civil Engineering	84.6
	Computer Science and Engineering	93.1
	Chemical Engineering	82.6
	Electrical and Electronics Engineering	86.1



	Electronics and Communication Engineering	91.1
	Electrical and Computer Engineering	84.1
	Mechanical Engineering	74.8
S2 (R) B. Arch Exam, May 2024	B. Arch	78.2
S2 (R) M. Plan Exam, May 2024	M. Plan	100
S2 (R) MCA Exam, May 2024	MCA	100

First Autonomous PG batch (2022-24) of students who have completed the programme in 2024 are eligible for receiving consolidated grade card and Provisional certificate from the college. The Consolidated grade card and Provisional certificate are printed in an imported tear resistance/waterproof TESLIN paper with digital signature and distributed to the students during the course completion ceremony held on 24.08.2024.

10. EXTENSION AND OUTREACH ACTIVITIES

1. Name of Professional Body : NSS
2. No. of student members : 192
3. Activities(To be listed in the table) :

Sl. No.	Name of Program	Type of the Programme/ Activity (workshop/seminar/talks....)	Date/s	Resource Person	Outcome/ Beneficiaries (Mention highlights, if any)
1	AIM IT	Talk	12/05/2024	Prof. Mohammed Shahid	KEAM aspirants
2.	Cancer awareness Class	Talk	5/01/2024	Dr. Resmi R	NSS Volunteers
3.	Excel workshop	Workshop	21,22/11/2023	Volunteers	TKMCE Students



4	HPV vaccine the need of the hour	Talk	29/01/2024	Dr. S Sajini	TKMCE Students
5	Lakshyam resume building workshop	Workshop	2/06/2024	Mr. Thufail Thalath Thajvudheen	TKMCE Students
6	Independence day celebration	Celebration talk	15/8/2023	Dr. T A Shahul Hameed	TKMCE community
7	Jeevrekha closing ceremony	Talk	27/2/24	Dr. Mery Sanshya	NSS Volunteers
8	NRPF Orientation	Talk	28/2/2024	Mr. Vishnu R	NSS Volunteers
9	KTU care orientation	Talk	13/2/24	Mr. Ivin Saji, Biya maria	NSS Volunteers
10	Rudhirasena orientation	Talk	15/11/2023	Ms.Preetha, Mr. Tony	NSS Volunteers
11	Metal health awareness session	Talk	10/10/23	Nikhitha sara Daniel	TKMCE students
12	Mind matters	Talks	16/6/23	Dr. Vidhya Giri Shankar	NSS volunteers of KTU
13	Republic day celebration	Celebration talk	26/1/2024	Dr. T A Shahul Hameed	TKMCE community
14	Vimukthi	Talk	25/06/24	Mr Sunil Kumar	NSS volunteers
15	Blood Survey	Survey	18/06/23		



16	Cross Fire	Competition	30/03/24		TKMCE community
17	Dwaitha	Blood donation camp and talk	23/06/23	Dr Mary Sanshya	
19	Haiku	Competition	23/03/24		TKMCE community
20	Ink Tales	Competition	19/06/23		TKMCE community
21	Kithab	Fundraising campaign	22/06/23		
22	Listen up	Competition	17/06/23		TKMCE community
23	Mens day Survey	Survey	20/11/23		TKMCE community
24	Minute masters	Competition	23/03/24		TKMCE community
25	Pace regional camp	Camp	02/12/23-03/12/23		NSS volunteers of KTU
26	Ripples of change	Competition	26/03/24		TKMCE community
27	Smash it	Badminton Tournament	25/08/23		TKMCE community
28	Snehapoorvam	Old age home visit	20/08/23		NSS Volunteers



29	Swachh Bharath Cleaning	Cleaning Drive	2/10/23		NSS Volunteers
30	Tech a Minute	Competition	16/06/23		TKMCE community

11. OTHERS

(i) Internal Quality Assurance Cell (IQAC)

IQAC of TKM College of Engineering aims to continuously monitor quality and create quality alerts and proposes ways and means to enhance quality.

Quality policy

We are committed to ensure:

- (i) Teaching learning process at par with institutions of national importance
- (ii) Benchmark for research and its sustainability in socio-technical aspects
- (iii) Efficient and transparent academic and financial administrative systems
- (iv) Use of credible, robust and relevant evaluation methods in all institutional systems
- (v) Techno-commercial sensibilities and environmental outlook instilled in graduates

URL: <https://tkmce.ac.in/#>

(ii) Campus Placements

Particulars	2021 - 22	2022 - 23	2023 - 24
No. of Companies visited	70	82	102
No. of Offers received	823	725	585
No. of students placed	526	506	442
Average salary (LPA)	4.7	5.02	5.50

BRANCHWISE PLACEMENT STATUS 2023 - 2024 (Upto 31 July 2024)



Branch	Strength	Placed	Offers	Placed %	Offered %
UG					
Civil Engineering	143	40	45	28.0%	31.5%
Computer Science & Engineering	142	91	159	64.08%	111.9%
Electronics & Communication Engineering	136	80	114	58.8%	83.8%
Electrical & Electronics Engineering	137	68	91	49.6%	66.4%
Mechanical Engineering	214	98	134	45.8%	62.6%
Chemical Engineering	67	26	34	38.8%	50.7%
Architecture	75	20	0	26.6%	0.0%
PG					
MTech- CSE	14	1	1	7.1%	7.1%
MTech- EC- CS	6			0.0%	0.0%
MTech- EE- IIC	7	1	1	14.3%	14.3%
MTech -EE- PS	2			0.0%	0.0%
MTech- ME- AI	14	4	4	28.6%	28.6%
MTech- ME- CIM	3	2	2	66.7%	66.7%
MTech- ME- IRC	2			0.0%	0.0%
MTech- Civil- SE & CM	16	7	8	43.8%	50.0%
MTech- Civil- TRE	17	2	2	11.8%	11.8%
MCA	40	13	13	32.5%	32.5%
TOTAL	1047	436	605	41.6%	57.8%

Highest CTC - 34 LPA

Average CTC - 5.31

(iii)

Central Library

I

Library Automation using RFID Technology completed with the support of KELTRON.

Purchase details (Amount spent)

Sl.No	Description	Amount
1	Print Book (Total Volumes Purchased-885)	9,27,970/-
2	Print Journals	1,70,909/-
3	E-Resources (EBSCO, Art & Architecture, ASCE, ASME, IEEE, ASPP, INFLIBNET, NLIST, DELNET, TURNITIN, SCIENCE DIRECT)	18,61,491/-



Report on Developmental initiatives: Repository (D Space), e-Resources, Activities/ Training Organized, RFID tagging

TKM Central library (TKMCEL) subscribes significant number of e-Journals and database Package covering major engineering streams. A campus wide access to various e-resources through institute IP address has been facilitated. Along with this, the Central library collaborates with INFLIBNET through INFED to Provide remote access to e-resources through portal <http://idp.tkmce.ac.in>. The summary of those resources is mentioned as below:

ITEM	e-JOURNALS	e-BOOKS
ASCE	35	NA
ASME	34	NA
DELNET	7424	13403
EBSCO Architecture	849	204
IEEE ASPP	202	NA
NLIST	6293	195809
Pearson	NA	249
Science Direct	275	NA
Springer	NA	1139
TOTAL	15112	210804

Circulation details:

TKMCEL has strong base of users who visit and appreciably utilized the services of the library during the period under report. The facility remains open from 9 am till 9.30 pm from Monday to Friday and from 10 am to 5 pm on Saturdays. A total number of 6241 general books and 57 books from Book Bank were issued, 7102 general books and 256 books from Book bank were returned during the period under report. RFID tagging of new books were also undertaken during this period.

CIRCULATION DETAILS			
	General	Book bank	Total
Check-out	6241	57	6,298
Check-in	7102	256	7,358

Institutional Repository

An Institutional Repository developed by using D space Software is operational. The purpose of this repository is to be a single platform that hosts the knowledge production of the institution. This includes faculty publications, e-books, e-conference proceedings, thesis, project reports, question papers etc. The total documents uploaded is 427 of which 361 are PG thesis.

Plagiarism detection

Plagiarism detection software- Turnitin is made available for faculty and research scholars. The Institutional access to Turnitin is made available with the support of APJKTU. Credentials for accessing Turnitin for faculties and research scholars are



created by the Librarian on demand. Access to Quillbot tool and Grammarly are made available to research scholars.

Orientation Programmes and Webinars

Orientation Programmes for faculties and students are conducted periodically. As many as 20 Orientation Programmes have been conducted in the above-mentioned period. Besides, programmes are also conducted for students/ faculties/ research scholars for promoting usage of library resources.

Name of the Programme	Date	Conducted by
Value of EBSCO in Research and Career Development	11/04/2023	EBSCO
Value of IEEE Xplore, Digital Library and EBSCO'S Art & Architecture Complete in Research, Project work and Career Development	11/04/2023	EBSCO
EBSCO host Research Platform: Features & Functionality at a Glance	21/12/2023	EBSCO

Conduct of German language classes

TKMCEL collaborated with CareerCAD Academy (DeutschVidya) for conducting online German language classes for TKM Group of Institutions. There were 12 students who registered for the course that spanned from September 2023 to December 2023.

Mentoring clubs: Civil Services Aspirants Club, Literary and Debating Club, NDLI club

TKMCEL offers its AROMA-LACE space for Civil Services club activities like reading and Group discussion. In addition to this, the Literary and Debating Club inaugurated its new "Lit Corner" in the premises of the Central library. The library also has an NDLI club that fosters utilisation of resources of the National Digital Library of India and regularly conducts online events.

12. FACULTY TRAINING AND DEVELOPMENT

Branch	FDP Organised	Workshop Organised	Training Programs Organised	FDP Attended	Workshops Attended
Architecture	0	0	0	9	0
Civil	0	1	1	27	2
Chemical	6	0	0	12	1



Chemistry	0	0	0	1	0
Computer Science and Engineering	0	1	0	13	21
ECE	1	1	0	7	12
EEE	1	0	3	9	12
Maths	0	0	0	1	0
Mechanical	0	0	0	23	3
Physics	0	0	0	1	0
	8	3	4	103	51

13. STUDENTS' PROFESSIONAL DEVELOPMENT AND PROFESSIONAL BODIES

(i) Entrepreneurship Cell

INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CELL (IEDC)

No. of student members: 1200

Sl. No.	Name of Program	Type of the Programme / Activity (workshop/seminar/talks....)	Date/s	Resource Person	Outcome/ Beneficiaries (Mention highlights, if any)
1	Seal the Deal	Competition	August 23, 2023		Enhanced business ideas and improved marketing and entrepreneurial skills.
2.	Workshop Introduction to Data Science	Workshop	August 24, 2024	Muhammed Haris and Swathi Mol (GTech Computer Education)	
3.	SMART HACK (Internal Smart India Hackathon)	Competition	September 27, 2023		Innovative solutions, enhanced skills, market readiness, collaboration, and networking.



4	Mastering Python Workshop	Workshop	6- 8 October 2023		Improve Technical Skill
5.	Arduino Adventure Workshop	Workshop	6- 8 October 2023		Improve Technical Skill
6.	INSPIRE-A-THON: A Reel Challenge	Competition	November 7th, 2023		
7.	STARTUP SURGE	Talk Session	November 20, 2023	Muhammed Salmun, CEO PhiScape	An inspiring talk session for young entrepreneurs and student startups by the visionary Founder of PhiScape.
8.	Webinar on Business Intelligence	Workshop	20 November 2023	Vysakh J, Data and Business Intelligence Engineer	
9.	Glitch	Competition	8 th December		Networking, skill development, and innovative ideas
10.	All you need to know about HACKATHON	Workshop	31st December 2023		Understand the overall idea of what a hackathon is and how it works.
11.	Jeopardy Jam	Competition	1st January 2024		
12.	HACK4TKM - Build Beyond the Limit	Hackathon	16 Feb 2024 to 18 Feb 2024		Fosters innovation, teamwork, and networking while addressing agriculture, food, and rural development



					challenges.
13.	YIP Orientation	Talk session	February 21, 2024	Chippy L, the YIP District Coordinator for Kollam	

(ii) Professional Bodies and Club Activities

Si. No.	Name of Professional body/ Clubs	No. of Student Members	No. of Programme/ Activity (workshop/seminar /talks)
1.	Computer Society of India	150	10
2.	Google Developer Student Club TKMCE	549	12
3.	ISTE (Indian Society for Technical Education) TKMCE Students Chapter.	1327	40
4.	The Institution of Engineers (India) – Computer Science	158	22
5.	National Service Scheme (NSS)	193	30
6.	IEEE SB	264	22
7.	Institution Of Engineers (India) EEE	79	10
8.	American Society of Civil Engineers (ASCE)	105	15
9.	Standards Club	31	3
10.	Institution Of Engineers (India) Civil Chapter TKMCE	370	4
11.	Society Of Student Architects (SSA)	73	11
12.	Institution Of Engineers (India) Chemical Engineering Students Chapter	105	3
13.	Institution Of Electronics and Telecommunication Engineers - IETE	133	3
14.	Centre For Robotics	30	6



15.	ISHRAE	23	4
16.	College Sports Council (Physical Education)	Open to all students	42
17.	Civil Service Aspirants' Club	50	12
18.	Dance Club	230	11
19.	Coding Club TKMCE	1000	13
20.	Music Club TKMCE	22	14
21.	Students Of TKMCE For the Empowerment of People And Society (STEPS)	Open to all students	22
22.	Maths Club - MATHVENTURES TKMCE	Open to all students	6
23.	Tinker Hub	865	11
24.	Bhoomithrasena And Forestry	45	4
25.	Foss Cell	Open to all students	3
26.	Society of Automotive Engineers TKMCE	76	6
27.	ASME	12	7
28.	Indian Institute of Chemical Engineers (IChE)	22	7
29.	Astron Club TKMCE	540 (Open to all students)	6

14. STUDENTS' SPORTS AND GAMES

SPORTS

Sl. No.	Name of Program	Type of the Programme/ Activity (workshop/seminar/talks....)	Date/s	Outcome/ Beneficiaries (Mention highlights, if any)
1	Athletics Men	APJKTU Athletics	03/03/2024	Champions
2	Football Men	APJAKTU Football Championship	23/10/2023-01/11/2023	Champions
3	Handball Men	APJAKTU Handball Championship	22/12/2023-03/12/2023	Champions
4	Handball Women	APJAKTU Handball Championship	22/12/2023-03/12/2023	Runners up
5	Football Women	APJAKTU Football Championship	23/04/2024	Runners up



6	Tennis Men	APJAKTU Tennis Championship	02/11/2023	Runners up
7	Tennis Women	APJAKTU Tennis Championship	02/11/2023	Runners up
8	Basketball Women	APJAKTU Zone Championship	23/11/2023	Champions
9	Basketball Men	APJAKTU Zone Championship	30/10/2023	Champions
10	Kabaddi Men	APJAKTU Zone Championship	26/10/2023	Champions
11	Kabaddi Women	APJAKTU Zone Championship	26/10/2023	Champions
12	Shuttle Badminton Men	APJAKTU Zone Championship	03/11/2023-04/11/2023	Champions
13	Shuttle Badminton Women	APJAKTU Zone Championship	03/11/2023-04/11/2023	Champions
14	Kho-kho Men	APJAKTU Zone Championship	26/11/2023	Champions
15	Kho-kho Women	APJAKTU Zone Championship	26/11/2023	Champions
16	Chess Men	APJAKTU Zone Championship	17/11/2023	Champions
17	Chess Women	APJAKTU Zone Championship	17/11/2023	Champions
18	Table tennis Men	APJAKTU Zone Championship	10/11/2023	Champions
19	Table tennis Women	APJAKTU Zone Championship	10/11/2023	Champions
20	Cricket Men	APJAKTU Zone Championship	29/02/2024	Champions
21	Volleyball Men	APJAKTU Zone Championship	24/11/2023	Runners up
22	Volleyball Women	APJAKTU Zone Championship	24/11/2023	Champions
National level Participants				
23	Akif Inayath V M	Football	30/12/2023	Inter University Championship
24	Sabith Santhosh	Football	30/12/2023	Inter University Championship
25	Navaneeth	Football	30/12/2023	Inter University Championship
26	Kirrankanth V	Football	30/12/2023	Inter University Championship



27	Kirrankanth V	Handball	02/05/2024	Inter University Championship
28	Adhil S	Basketball	13/11/2023	Inter University Championship
29	Faisy mol H	Handball	10/01/2024	Inter University Championship
30	Aparna R	Handball	10/01/2024	Inter University Championship
31	Febna K	Handball	10/01/2024	Inter University Championship
32	Hanaan Zain P V P	Handball	10/01/2024	Inter University Championship
33	Finash T K	Handball	02/05/2024	Inter University Championship
34	Jito Tonce T	Handball	02/05/2024	Inter University Championship
35	Dhanith Krishnan M	Handball	02/05/2024	Inter University Championship
36	Malavika E Biley	Tennis	08/11/2023	Inter University Championship
37	Muhammed Danish M P	Tennis	27/12/2023	Inter University Championship
38	Muhammed Jinan C A	Tennis	27/12/2023	Inter University Championship
39	Aman Vijayan	Kho kho	26/12/2023	Inter University Championship
40	Niranjana P	Wushu	13/02/2024	Inter University Championship
41	Theja J B	Karate	15/01/2024	Inter University Championship
42	Aiswarya M S	Kabaddi	26/11/2023	Inter University Championship

Dance Club

Sl. No.	Name of Program	Type of the Programme/ Activity (workshop/seminar/talks....)	Date/s	Outcome/ Beneficiaries (Mention highlights, if any)
1	Stomp The Yard	Inter-College Group Dance Competition conducted as part of Hestia	4/05/24	Provides an opportunity for the dancers to showcase their talent.



2.	Get Raw	Dance battle conducted as part of Hestia	5/05/24	Helped us connect with dancers all over Kerala.
3.	SIP	Workshop	14/09/23 15/09/23	Helped us discover new talents.
4.	Online Dance Competition	Competiton	23/07/24	Provides an opportunity for the dancers to showcase their talent.
5.	Qalbile Drip (Conducted by students union)	Flashmob	10/09/23	Provides an opportunity for the dancers to showcase their talent.
6.	Filmfest	Flashmob	14/10/23	Provides an opportunity for the dancers to showcase their talent.
7.	TedX Date Reveal	Event conducted by Tedx- Performed by dance club	15/02/24	Provides an opportunity for the dancers to showcase their talent.
8.	Onam Culturals	Dance Culturals for the students	9/09/24	Provides an opportunity for the dancers to showcase their talent.
9.	Union Day	Conducted by Union- Performed by dance club	12/7/23	Provides an opportunity for the dancers to showcase their talent.
10.	Alumni Meet	Dance showcase by dance club	16/10/23	Provides an opportunity for the dancers to showcase their talent.
11.	Yule Ball (Conducted by students union)	Dance showcase by dance club	Dec 2023	Provides an opportunity for the dancers to showcase their talent.

Music Club

(i) Sl. No.	Name of Program	Type of the Programme/ Activity (workshop/seminar/talks....)	Date/s	Outcome/ Beneficiaries (Mention highlights, if any)
1	Student Induction Program	Activity Session	13/09/23, 14/09/23	
2.	AKSC'23	Live performance	17/09/23	



3.	XSCAPE	Band Music Competition	16/10/23	1st runner up
4	IKIGAI	Live performance	23/10/23	
5	Love Locks	Live performance	5/12/23	
6	DHRUVA	Live performance	6/12/23	
7	HACK4TKM	Live performance	17/02/24	
8	TEDxTKMCE	Live performance	2/03/24	
9	Husn	Live performance	16/03/24	
10	TKMMUN'24	Live performance	23/03/24	
11	Tempo Tussle	Live performance	2/05/24	
12	Voice of Hestia	Solo Music Competition	4/05/24	Hosted the competition
13	ENCORE	Band Competition	5/05/24	Hosted the competition
14	HESTIA'24	Live performance	3/05/24	

15. ALUMNI AFFAIRS

The TKM College of Engineering Alumni Association continues to play a vital role in fostering connections between past and present members of the TKMCE community. Below is a summary of the major events and activities:

ANNUAL GENERAL BODY MEETING (JANUARY 26TH, 2024)

The Annual General Body meeting of the TKM College of Engineering Alumni Association was held on January 26th, 2024. During this meeting, the Alumni Times, a publication showcasing the institution's achievements, was unveiled by Jb. T. K. Shahal Hassan Musaliar, Honorable Chairman of the TKM College Trust. The gathering also witnessed the election of new office bearers, with Dr. Shahul Hameed (Principal) taking office as the President of the Alumni Association and Dr. Mathew Skaria as Secretary. This meeting served as an important platform for strengthening ties within the TKMCE community.

ALUMNI MERIT EVENING (AUGUST 23rd, 2024)

The Alumni Merit Evening 2024 was organized on August 23rd to honor the meritorious students and rank holders of the academic year 2023-2024. Er. Asha



Ashokan, Deputy Chief Engineer of Kerala State Electricity Board Ltd., Kollam Electrical Circle, graced the occasion as the Chief Guest. Students who excelled in academics and sports were awarded merit certificates and prizes, recognizing their dedication and hard work. The event highlighted the commitment of the Alumni Association to promote academic excellence and motivate students toward higher achievements.

The awards currently offered by the Alumni Association of TKM College of Engineering (TKMCE) include:

1. Alumni Proficiency Award	Best student considering curricular & extracurricular activities (passed out batch) (One student each from PASS OUT batch)
2. Alumni Merit Certificate	Who secures maximum marks in (B. Tech / B. Arch / MCA) (One student each from PASS OUT batch)
3. Prizes introduced by Alumni & PTA (2 students each from all semesters)	Highest mark, first appearance in S1 &S2, S3 & S4, S5 & S6.

ALUMNI SUPPORT AND CONTRIBUTIONS

The Alumni Association continued its active role in supporting various institutional projects and student welfare programs. The main Contribution in 2023 -24 includes:

- A Technology Business Incubation Centre, named "SEEDS-97" (Startup Enabled Entrepreneurship Development Centre), worth 25 Lakhs with all modern amenities was established by the 1997 Alumni batch.
- Contributions from alumni members have been utilized for student scholarships, institutional projects and made contributions towards Relief activities for Wayanad Landslide victims.

16. CONCLUSION

The college has successfully completed its second year under the autonomy framework. Dedicated efforts were made to adhere to the academic calendar, ensuring that each batch completes their program within the stipulated timeframe. Significant progress in academics and research has been achieved with the unwavering support and guidance of our stakeholders, management, well-wishers, the affiliated university, and the government. We are pleased to submit the Annual



Report for the year 2023-24 to the UGC, in compliance with its guidelines. This submission not only fulfills the required protocols but also allows us to evaluate our activities, assess outcomes, and implement necessary improvements to streamline our processes. We extend our heartfelt gratitude to the UGC for providing us with the opportunity to enhance our institutional processes and refine our academic programs. By signing this document, we affirm that the data and information presented in this report are accurate and true to the best of our knowledge and belief.



Dr. Sabeena Beevi K
IQAC Coordinator



Dr. Sajeeb R
Principal

Dr. SAJEEB R
PRINCIPAL IN-CHARGE
THANGAL KUNJU MUSALIAR
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Kollam
19.12.2024

