



## **AQAR REPORT REVIEW**

**T. K. M. COLLEGE OF ENGINEERING, KOLLAM**

**Aishe id : C-43683**

**Submitted for : 2018-2019**

**Submitted Date : 06/12/2019 03:00 PM**

**Reference AQAR Link : [Click here](#)**

**Over all Comments :**

**Acceptance date : 06/12/2019**



## Yearly Status Report - 2018-2019

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>		<b>T. K. M. COLLEGE OF ENGINEERING, KOLLAM</b>
Name of the head of the Institution		<b>Dr. T. A. Shahul Hameed</b>
Designation		<b>Principal</b>
Does the Institution function from own campus		<b>Yes</b>
Phone no/Alternate Phone no.		<b>04742712024</b>
Mobile no.		<b>9847072024</b>
Registered Email		<b>principal@tkmce.ac.in</b>
Alternate Email		<b>iqac@tkmce.ac.in</b>
Address		<b>TKM College PO, Karicode</b>
City/Town		<b>Kollam</b>
State/UT		<b>Kerala</b>
Pincode		<b>691005</b>
<b>2. Institutional Status</b>		

Affiliated / Constituent	<b>Affiliated</b>
Type of Institution	<b>Co-education</b>
Location	<b>Urban</b>
Financial Status	<b>state</b>
Name of the IQAC co-ordinator/Director	<b>Dr. Sadiq A.</b>
Phone no/Alternate Phone no.	<b>04742712024</b>
Mobile no.	<b>9497361282</b>
Registered Email	<b>principal@tkmce.ac.in</b>
Alternate Email	<b>iqac@tkmce.ac.in</b>

### 3. Website Address

Web-link of the AQAR: (Previous Academic Year)	<a href="http://tkmce.ac.in/wp-content/uploads/2016/09/AQAR-2017-18.pdf">http://tkmce.ac.in/wp-content/uploads/2016/09/AQAR-2017-18.pdf</a>
<b>4. Whether Academic Calendar prepared during the year</b>	<b>Yes</b>
if yes,whether it is uploaded in the institutional website: Weblink :	<a href="http://tkmce.ac.in/academic-calendar.html">http://tkmce.ac.in/academic-calendar.html</a>

### 5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
<b>1</b>	<b>A</b>	<b>3.11</b>	<b>2017</b>	<b>27-Nov-2017</b>	<b>26-Nov-2022</b>

### 6. Date of Establishment of IQAC

**13-Oct-2015**

### 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
<b>Academic Audit (Internal &amp; External)</b>	<b>23-Nov-2018 14</b>	<b>4000</b>
<b>NAAC-AQAR submitted</b>	<b>20-Dec-2018 365</b>	<b>4000</b>

New AMS Implementation	14-Jan-2019 365	8000
Revised Student Academic Record-Format	01-Jan-2019 365	4000
Initiated Students Portfolio	01-Mar-2019 365	4000
NBA Visit	02-Mar-2019 1	1500
Student Satisfaction Survey (as per NAAC template)	13-Jun-2019 14	4000
AICTE Visit	05-Apr-2019 1	4000
Visit of Council of Architecture	02-May-2019 2	450
NIRF	29-Nov-2018 365	8000
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**8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Dr. Reby Roy K. E.	KSCSTE Project	KSCSTE	2018 2	300000
Institution	TEQIP-II	State Govt	2018 1	3500000
QIP Centre	QIP	AICTE	2018 1	2786500
Dr. Rijo Jacob Thomas	BRNS Project	DAE	2017 2	533750
Dr. Shafi K. A.	BRNS Project	DAE	2017 2	295625
No Files Uploaded !!!				

**9. Whether composition of IQAC as per latest NAAC guidelines:**

Yes

Upload latest notification of formation of IQAC

[View File](#)

**10. Number of IQAC meetings held during the year :**

1

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website

Yes

Upload the minutes of meeting and action taken report	<a href="#">View File</a>
<b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	<b>No</b>

<b>12. Significant contributions made by IQAC during the current year(maximum five bullets)</b>
<b>NBA Accreditation</b>
<b>Student Portfolio</b>
<b>Introduced OBE Based Academic Management System</b>
<b>Academic Audit</b>
<b>Social Outreach Programs</b>

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**13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year**

Plan of Action	Achivements/Outcomes
<b>Conduct Academic Audit</b>	<b>Conducted academic audit. The teachinglearning process is made alignemnt with that said by the University</b>
<b>Coordinate NBA visit</b>	<b>NBA eavluated three UG programmes, viz. Electronics and Communication, Electrical and Electronics Engineering, Computer Scinece and Engineering, accredited.</b>
<b>Orientation Program for newly joined faculty and staff</b>	<b>New faculties are exposed to OBE and student-teacher intercation aspects.</b>
<b>Introduce Student Portfolio</b>	<b>Implemented student portfolio. Students are to upadte it. It helps studnets to utlize their potential to improve themselves.</b>

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<b>14. Whether AQAR was placed before statutory body ?</b>	<b>Yes</b>
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Name of Statutory Body	Meeting Date
<b>BoG</b>	<b>26-Oct-2019</b>

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	Yes
Date of Visit	02-Mar-2019
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2019
Date of Submission	25-Feb-2019
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief description and a list of modules currently operational (maximum 500 words)	<p>Linways AMS is the academics management system used in the college. It is a platform that supports Outcome Based Education. It gives controlled access to students, parents, faculties and administrators of various levels. It enables the students and parents to monitor the performance of students from anywhere at anytime. Faculty updates the academic data and monitors student performance through this platform. The teaching plan, teaching notes, assignment questions and question bank are uploaded on the Linways AMS for the use of the students. The evaluation of teachers by students is also done for every course through this to obtain feedback in teaching. It has various modules for course file, course diary, defining CO, PO, PSO mapping, COPO index computation, internal evaluation results and reports, progress report, class performance statistics, teacher evaluation, attendance, Student personal data, announcements/notices, leave submission facility, timetable, grievance redressal and so on.</p>

### Part B

#### **CRITERION I – CURRICULAR ASPECTS**

##### **1.1 – Curriculum Planning and Implementation**

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

The institution meticulously plans for effective implementation of the

curriculum. The process is detailed below: In the beginning of the academic semester, the college prepares an academic calendar (semester-wise academic schedule) comprising the entire schedule for the semester. This is followed by an academic budget which enlists the academic programs for the respective semester with a budget planning. The College Planning Committee (CPC) scrutinizes and approves the programs listed and is forwarded to the Principal for necessary allocation of funds to individual departments. Before the end of current semester, the subjects for next semester from curriculum are allotted to the faculty. The subject priorities of faculty are presented before the Department Academic Committee (DAC) and approved. Options are given to students for selecting the elective subject, which in turn is consolidated by the Senior Advisor and presented to DAC. The opted subjects are allocated to faculty based on their field of specialization, number of times subjects taught and experience. In the beginning of each semester, a course plan is prepared. The concerned faculty for each subject prepares a detailed lesson plan, giving the units of the syllabus and proposed date of completion of the unit. It also provides information about the text books to be followed and the books for reference. A schedule for internal assessments is also prepared (internal assessment schedule) and distributed to students so as to avoid clustering of assessments during a particular period. The academic calendar and schedule of internal assessment are uploaded in LINWAYS (the campus management software) and can be easily accessed by the students. Course files are prepared and maintained by the faculty which includes syllabus, course plan, teaching materials such as tutorials, assignments, internal test question papers, previous year University question papers etc. Laboratory manuals are prepared incorporating detailed procedures for conducting of experiments. Apart from regular classes, seminars are conducted to enhance the presentation and communication skills of students. The Department Quality Assurance Cell (DQAC) approves the course plan for various courses and scrutinizes the question papers submitted for continuous evaluation (Two Internal assessment test). Academic Committee monitors the functioning of course committee and class committees. The course committee reviews the conduct of the courses, adherence to the course plans and time schedule, completion of the syllabus and standards of internal tests. Suitable remedial actions needed for the successful conduct of the course are decided by DQAC. The parents and students can access Linways AMS using the login provided to them to know about the academic progress. Mid-term and end-term faculty evaluations are collected from students and analysis is done for improving the teaching learning process. The Institute has student chapters of professional societies like IEEE, ISTE, IEI, MEA, IGS, IETE, IICHe, CSI, SAE which organise co-curricular activities for skill upgradation and to inculcate a social commitment in the students. The NPTEL student chapter assist the students to enroll and successfully complete the MOOC based learning courses by IIT's

#### 1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
Introduction to GIS	NA	24/07/2018	7	NA	yes

#### 1.2 – Academic Flexibility

##### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
MPlan	Urban Planning	01/06/2018
No file uploaded.		

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
<b>No Data Entered/Not Applicable !!!</b>		

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

Certificate	Diploma Course
<b>No Data Entered/Not Applicable !!!</b>	

### 1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
<b>No Data Entered/Not Applicable !!!</b>		
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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
<b>BTech</b>	<b>Civil Engineering</b>	<b>115</b>
<b>BTech</b>	<b>Mechanical Engineering</b>	<b>261</b>
<b>BTech</b>	<b>Electrical and Electronics Engineering</b>	<b>300</b>
<b>BTech</b>	<b>Electronics and Communication</b>	<b>164</b>
<b>BTech</b>	<b>Chemical Engineering</b>	<b>66</b>
<b>BTech</b>	<b>Computer Science and Engineering</b>	<b>76</b>
<b>BTech</b>	<b>Production Engineering</b>	<b>67</b>
<b>MCA</b>	<b>Master of Computer Application</b>	<b>24</b>
<b>BArch</b>	<b>Architecture</b>	<b>180</b>
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### 1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
<b>The institution encourages the practice of obtaining feedback from various stakeholders such as students, alumni, faculty from other institutes, parents</b>

and eminent personality from Industry and Government organisations. The class committee meetings that are held periodically provide a platform for the students to discuss academic and nonacademic matters. Parentteacher association meetings are held periodically. Their suggestions are incorporated in improving the curriculum. The alumni surveys and employer surveys are conducted to give constructive suggestions in improving the curriculum. The valuable suggestions from industrial personnel during meetings/industrial visits, in improving the curriculum needs to match with the needs of the industry are duly communicated to the University. The institute also collects feedback from the recruiters on the performance of the students. This enables the institution to understand what industry expects from the students and modify the action plan accordingly. The college is often visited by academicians within India and also from abroad. Their views on the curriculum are obtained and efforts are made to incorporate the same. The institution takes part in the curriculum development process through appropriate analysis of feedback given by the various stake holders from time to time and makes suggestions for modifying curriculum. All the suggestions from various stakeholders are communicated to the University through syllabus committee members, BoS meetings or during syllabus revision.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
<b>No Data Entered/Not Applicable !!!</b>				
<a href="#">View File</a>				

### 2.2 – Catering to Student Diversity

#### 2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
<b>2018</b>	<b>3483</b>	<b>275</b>	<b>172</b>	<b>11</b>	<b>51</b>

### 2.3 – Teaching - Learning Process

#### 2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
<b>183</b>	<b>165</b>	<b>7</b>	<b>75</b>	<b>75</b>	<b>9</b>

#### 2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

The college has a very powerful and effective mentoring system (advisory system) to support activities of the students. The advisory system consists of a senior advisor and an advisor for approximately 30 students of each batch. The system helps the students in their academic and personal matters and provides all support in case of any grievance. The advisors maintain good rapport with parents to support such activities. In addition to that, Student Grievance Cell and a Women's Grievance Cell are functioning effectively in the campus to address grievances if any, of students. The college has appointed a professional counsellor on a regular basis to provide personal support students. Separate Counselling Room is provided for the same. Counselling classes are given

to students individually and in groups, to propagate the need to elude from the use of drugs and unhealthy habits. Motivational classes are arranged in association with advisory team for boosting the confidence level of the weaker students. Awareness programmes on rules and regulations of the institute, antiragging measures taken by the institute, policies of antiragging cell are conducted for the first year students. Group Counselling on public speaking, stress management, CV preparations, effective communication skills are also conducted regularly. Progress report indicating performance in internal tests, assignments and attendance of all students are uploaded in Linways AMS. The students and parents can get the details by visiting the website making use of their respective user IDs. Progress reports including the University marks are sent to parents. Parents of underperforming students are informed by the faculty advisor over phone and they are directed to meet the HoD and the faculty handling classes. Classwise PTA meetings are held during each semester and steps to correct and improve performance of the students are thoroughly discussed during the interaction among faculty advisor, HoD, other staff members, parents and students. The same will be implemented and progress is monitored. In addition to the scholarships given by external agencies, the college also gives an Institute level scholarship known as TKM MeritCumMeans scholarship (TKM MCM) for the bright and needy students. This scholarship is given exclusively from a monthly voluntary contribution from the entire staff of the institution. The MCM scheme is to provide financial assistance to the poor and meritorious students to enable them to pursue professional courses. The alumni association gives merit awards the top performing students in each branch.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
3758	226	1:30

## 2.4 – Teacher Profile and Quality

### 2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
183	183	0	12	65

### 2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2018	Dr. Adarsh S	Associate Professor	Excellence in Ph.D. Thesis Award at IIT Bombay
2018	Dr. Shahul Hameed	Professor	Indian Patent
2018	Dr. Sabeena Beevi K	Associate Professor	Secured National Best thesis Award Instituted by IEEE Home society
2018	Sunitha Beevi K	Assistant Professor	IEEE PES Outstanding Chapter Volunteer award by IEEE PES Kerala chapter
2018	Dr.Dili A S	Professor	Review Recognition of Elsevier Springer
2018	Ayappan A K	Associate Professor	Paper presentation at UN Headquarters UNAI for TKMCE
2018	Haritha C	Assistant Professor	Swami Vivekananda

			YuvaPrathiba Award 2017
2019	Dr. Mubarak Ali	Assistant Professor	Marquis Lifetime Achievement Award
2019	Dr. Mubarak Ali	Assistant Professor	International Research Collaboration Agreement with Ir. Dr. Mohamed Thariq, Biocomposite Lab, University Putra Malaysia (UPM)
2019	Dr. Mubarak Ali	Assistant Professor	International Research Collaboration Agreement with Professor. Sher Afghan Khan, International Islamic University, Malaysia
2019	Dr. Mubarak Ali	Assistant Professor	Expert Lecture delivered on "Application of Statistical Design of Experiments in Research" at International Islamic University Malaysia
2019	Dr. Mubarak Ali	Assistant Professor	Invited Keynote Speech delivered on "Impact damages in Aircraft Composite Structures" in National Conference on Emerging Vistas of Engineering Management (NCEVEM'19) organized by Viswajyothi College of Engineering Technology, Vazhakulam, Kera
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## 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
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**No Data Entered/Not Applicable !!!**

[View File](#)

2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

The institute has made its own reforms in the evaluation process at college level. The institute is presently following outcome based evaluation on various Graduate Attributes. For this, the institute has specified POs based on the 12 Graduate Attributes suggested by National Board of Accreditation (NBA). The individual departments in the institute utilize unique set of rubrics for assessing individual POs. Each Course Outcomes (CO) are oriented to match with one of the PO's. For every course, the students are subjected to various Continuous Assessment (CA) procedures, namely, assignments, quizzes, tutorials and class seminars that are evaluated by the faculty in charge. Two internal examinations (Series Tests) are also conducted in a semester. CA's are formulated to assess the corresponding CO's. Every semester, students are further evaluated by the University Exam (summative assessment) for maximum marks of 100. The total marks scored for a subject is taken as 150, which is the sum of CA marks (50) and University Exam marks (100). The CA marks for the individual subjects shall be computed by giving weightage to Attendance, Series tests and different assignments. The Department Academic Coordinators are entrusted to collect and consolidate the results from the faculty members. The Continuous Assessment (CA) procedure enlightens the faculty in charge about the strengths and weaknesses of the class. This further helps the faculty to suitably modify the course delivery measures, identify the shortcomings in students and gives them an opportunity to improve their skills through various activities.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

At the beginning of each semester, the academic calendar prepared by the Dean will be presented in the HoD meeting. The approved draft will be discussed further in the departmental meetings and presented in the Department Academic Committee (DAC)/faculty meeting. The approved academic calendar is then published in the college website along with a schedule of internal assessment for each department. The institute develops the academic calendar in line with the calendar published by the University.

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

[www.tkmce.ac.in/Academics/Departments](http://www.tkmce.ac.in/Academics/Departments)

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
<b>No Data Entered/Not Applicable !!!</b>					
<a href="#">View File</a>					

## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

<http://tkmce.ac.in/wp-content/uploads/2016/09/STUDENT-SATISFACTION-SURVEY-AY-2018-19.pdf>

**CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION****3.1 – Resource Mobilization for Research**

## 3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	1095	DAE, Govt. of India	25.15	5.33
Industry sponsored Projects	1095	Steel Industries Kerala limited	0.25	0
Minor Projects	730	CERD	1.96	1.96
Projects sponsored by the University	365	MHRD, through IIT Guwahati	3	2.4
Industry sponsored Projects	150	Office of the chief conservator of forest, southern circle, Kollam	0.1	0.1
Projects sponsored by the University	365	CERD	2	1.6
Projects sponsored by the University	365	TEQIP2	1.45	1.45
Projects sponsored by the University	365	TEQIPI2	1.5	1.5
Students Research Projects (Other than compulsory by the University)	365	CERD	0.35	0.35
Students Research Projects (Other than compulsory by the University)	365	CERD	0.35	0.35
Students Research Projects (Other than compulsory by the University)	365	CERD	0.33	0.33
Major Projects	10	KSEB	11	11
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**3.2 – Innovation Ecosystem**

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
One day Industrial Conclave "Scenario of major industries of Kerala to meet Global Challenges"	Chemical Engineering	22/03/2019
Red Hat Academy Orientation Programme Red Academy Lab Setup	Computer Science Engineering	25/02/2019
Effective course delivery using Moodle	Computer Science Engineering	23/07/2018
Data Science	MCA	09/08/2018
Software Development Cost Estimation	MCA	23/11/2018
Agile Methodology	MCA	23/11/2018
Hands on training on Android Application development	MCA	23/03/2019
Machine Learning with Python	MCA	11/04/2019
Deep learning	MCA	12/04/2019

3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Smart India Hackathon	Swetha S, Malavika V	AICTE	02/03/2019	Hackathon
ACM Women Hackathon	Varsha Elsa, Aleena John, Aparna Susan	ACM	08/10/2018	Hackathon
Startup India Contest	Manu Mukundhan, ReymondHakkim	Kerala Startup Mission	26/11/2018	Startup
Best Project Award	Jayakrishnan KP, Athul Harold, Arya Gopakumar	NIT Calicut	06/10/2018	Project
Organic Light Emitting Structure Using A Novel Elastomer Composite Transparent Conducting Anode Replacing Transparent Conducting Oxides (Tcos)	Dr. T.A. Shahul Hameed,	Indian Patent	07/08/2018	Patent

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3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
IEDC	TKMCE IEDC	Kerala Startup Mission	Air Innovations	EMobility Solutions, Robotics	02/07/2018
IEDC	TKMCE IEDC	Kerala Startup Mission	Vector	Electronics Hardware Design	17/10/2018
IEDC	TKMCE IEDC	Kerala Startup Mission	Tink Dynamics	Swarm Drone Technology	04/02/2019
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3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
	20000	

3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
Mechanical Engineering	2

3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
National	Mechanical Engineering	3	1
National	Mathematics	2	1
National	Chemical Engineering	2	1
National	Civil Engineering	3	1
International	Mechanical Engineering	24	1
International	Mathematics	6	1
International	Civil Engineering	30	1
International	Electronics and Communication Engineering	12	1
International	Electrical and Electronics Engineering	9	1
International	MCA	1	1
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3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication

<b>Mechanical Engineering</b>	<b>7</b>
<b>Civil Engineering</b>	<b>12</b>
<b>Computer Science Engineering</b>	<b>18</b>
<b>Electronics and Communication Engineering</b>	<b>23</b>
<b>Electrical and Electronics Engineering</b>	<b>30</b>
<b>MCA</b>	<b>3</b>
<b>No file uploaded.</b>	

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
<b>No Data Entered/Not Applicable !!!</b>						
<a href="#">View File</a>						

3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
<b>No Data Entered/Not Applicable !!!</b>						
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3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
<b>Attended/Seminars/Workshops</b>	<b>30</b>	<b>30</b>	<b>35</b>	<b>4</b>
<b>Presented papers</b>	<b>57</b>	<b>4</b>	<b>0</b>	<b>0</b>
<b>Resource persons</b>	<b>2</b>	<b>10</b>	<b>8</b>	<b>0</b>
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### 3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
<b>No Data Entered/Not Applicable !!!</b>			
<a href="#">View File</a>			

3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
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NSS TKMCE Student Activity	Special Appreciation Award For Best Unit	NSS Cell, AJAKTU	100
'Green Kollam' Awareness Program	Award For Participation	Kollam Corporation	70
NSS TKMCE Student Activity	Special Appreciation Award For Best Program Officer	NSS Cell, AJAKTU	100
NSS TKMCE Student Activity	Best Scholar Award	NSS Cell, AJAKTU	100
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
Waste Management Awareness Session	NSS Unit, TKMCE	Swatch Bharat Abhiyan	4	75
Plastic Reuse Workshop	Balika Bhavan	Swatch Bharat Abhiyan	2	55
Swachh Bharat Summer Internship Orientation Phase 1 And 2	NSS Unit, TKMCE	Swatch Bharat Abhiyan	4	40
Clean Campus Green Campus	NSS Unit, TKMCE	Swatch Bharat Abhiyan	4	30
Clean Campus Green Campus	NSS Unit, TKMCE	Swatch Hi Sewa	4	30
Beach Cleaning	NSS Unit, TKMCE	Swatch Bharat Abhiyan	2	80
National Integration Day Oath Making Ashramam Cleaning Swachh Bharat	NSS Unit, TKMCE	Swatch Bharat Abhiyan	1	50
Ashramam Cleaning Swachh Bharat	NSS Unit, TKMCE	Swatch Bharat Abhiyan	3	90
Swachh Bharat Swachh Paryatan	Kerala Suchithwa Mission	Swatch Bharat Abhiyan	2	55
No file uploaded.				

### 3.5 – Collaborations

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Collaborative work (MoU signed with RCC (Regional Cancer Center))	Lung Cancer Detection using Artificial Intelligence Techniques	RCC (Regional Cancer Center)	2019
Workshop on Recent Advances in Nanotechnology Dr. P.S. Sreeprasanth from KU Leuven University, Belgium	Faculty and students of TKMCE	Management TKMCE	1
LoC with Universiti Teknologi Malaysia (UTM), Malaysia.	Faculty and students of TKMCE	Management TKMCE	1
MoU with Universiti Putra Malaysia (UPM), Malaysia	Faculty and students of TKMCE	Management TKMCE	1
MoU with IIT Guwahati	Faculty	MHRD, IIT Guwahati	365
Internship programme Dr. Jung Kyung Kim, Kookmin University	Students	Kookmin University	45
Keynote Speaker, A Novel Approach to Painless Drug Administration using Needleless Drug Delivery System: A Step towards better Future	International Advanced Medical Robotics Symposium 2019 Faculty and researchers from different universities	Mahidol University, Bangkok, Thailand	2
Collaborative Research on Medical Imaging	Medical Imaging for research scholars	SCTIMST (Sree Chithira Tirunna Institute of Medical Science And Technology)	2018
No file uploaded.			

3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
<b>No Data Entered/Not Applicable !!!</b>					
<a href="#">View File</a>					

3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate

houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
UPM, Malaysia	14/03/2019	Collaborative Research	4
UTM Malaysia	02/05/2019	Collaborative Research and Student Internship	10
IIT Guwahati	12/12/2018	Research	2
IIUM, Malaysia	15/02/2019	Collaborative Research	4
Edify Data Science Pvt Ltd.vt. Ltd., Bangalore	25/07/2018	Placement and Internship	2
Ospyn Technologies	26/07/2018	Placement and Internship	5
CLAP Research Private Ltd.	02/07/2018	Placement and Internship	2
Yatramantra Holidays Private Ltd.	25/07/2018	Placement and Internship	4
Minerva Software Pvt Ltd.	26/06/2018	Placement and Internship	2
RCC Trivandrum	25/04/2019	The Research collaboration is intended to allow the pursuit of new, unforeseen opportunities in lung cancer detection	1
No file uploaded.			

#### **CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES**

##### **4.1 – Physical Facilities**

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
150	150.06

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Newly Added
Laboratories	Existing
Seminar Halls	Newly Added
Classrooms with LCD facilities	Newly Added
Classrooms with Wi-Fi OR LAN	Newly Added

Seminar halls with ICT facilities	Newly Added
Video Centre	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added

#### 4.2 – Library as a Learning Resource

##### 4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
KOHA	Fully	3.16.09	2014

##### 4.2.2 – Library Services

Library Service Type	Existing	Newly Added	Total
<b>No Data Entered/Not Applicable !!!</b>			
<a href="#">View File</a>			

##### 4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
<b>No Data Entered/Not Applicable !!!</b>			
<b>No file uploaded.</b>			

#### 4.3 – IT Infrastructure

##### 4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MGBPS)	Others
Existing	901	619	901	34	130	23	95	200	0
Added	107	105	107	0	0	1	1	80	0
<b>Total</b>	<b>1008</b>	<b>724</b>	<b>1008</b>	<b>34</b>	<b>130</b>	<b>24</b>	<b>96</b>	<b>280</b>	<b>0</b>

##### 4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

<b>280 MBPS/ GBPS</b>
-----------------------

##### 4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
<b>No Data Entered/Not Applicable !!!</b>	

#### 4.4 – Maintenance of Campus Infrastructure

##### 4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
50	5910956	100	9095625

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

The annual budget and allocation of funds for regular monitoring of utilization of funds for maintenance, ensures the upkeep of the infrastructure in the institute. The college has an Infrastructure Committee which is assigned the task of maintenance and upkeep of the infrastructure. Each department has representatives in it. The day to day maintenance of the general infrastructure is done by a Facilities Management Committee. Each laboratory is under a lab in charge and assistant lab in charge. The technical staff of the laboratory performs the duty of maintenance and upkeep of the equipments. Annual stock verification of all the equipments of the college is done by a committee constituted by the Principal for that purpose. The campus networking centre maintains the IT services needed for the staff and students of the college. Facilities Management Committee (FMC) The FMC has Engineering Cell, Cleanliness Cell and an Engineering and Cleanliness Help Desk under it. The FMC has a Chief Coordinator and separate coordinators for each engineering division. The important duties entrusted to the Chief Coordinator of FMC are Operation Management of Engineering Cleanliness Cell and Annual Budget Preparation. The Chief Coordinator of FMC reports to the head of Institution. The FMC is in charge of all facilities and they conduct scheduled routine inspection and do the monitoring of department facilities such as smart classrooms, tutorial rooms, seminar rooms, labs, workshops etc. Any complaints reported, will be inspected and appropriate action will be taken to resolve it. The Chief Coordinator has been entrusted to make a proposal for future planning/preventive maintenance and cleanliness. There is a faculty incharge from each department who will be working in coordination with the Chief Coordinator of FMC. For the proper functioning of all activities during the time of power failures, adequate measures have been taken. Generators of specifications 200 kVA (two numbers) and 30 kVA are available in the institute, which ensure that there is no interruption in the conduct of the academic activities in the smart class rooms of the college during such situations. To provide reliable back up power, steps are taken to install a new 500 kVA generator. There is a centralized UPS system to ensure the functioning of the computer laboratories, sensitive equipments in all labs and seminar halls in each department. In addition, all the departments with computer laboratory facility have their own UPS. Timely monitoring is done to ensure that the systems and the batteries are working well. The technical staff in charge is entrusted with this job. The electrical works section under FMC works in coordination with the Department of Electrical and Electronics Engineering for proper guidance. The rain water harvesting system in the college ensures continuous availability of water in the dug wells and thereby ensures constant supply of water in the college.

<http://tkmce.ac.in/other-facilities.html>

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

Name/Title of the scheme	Number of students	Amount in Rupees
<b>No Data Entered/Not Applicable !!!</b>		

[View File](#)

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
<b>No Data Entered/Not Applicable !!!</b>			
<a href="#">View File</a>			

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2018	Career roadmap and introduction to training and placement	774	774	154	340
<b>No file uploaded.</b>					

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
<b>No Data Entered/Not Applicable !!!</b>		

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
<b>No Data Entered/Not Applicable !!!</b>					
<a href="#">View File</a>					

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
<b>No Data Entered/Not Applicable !!!</b>					
<a href="#">View File</a>					

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
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NET	3
GATE	116
CAT	2
GRE	7
TOFEL	12
Civil Services	2
Any Other	12
No file uploaded.	

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
<b>No Data Entered/Not Applicable !!!</b>		
<a href="#">View File</a>		

**5.3 – Student Participation and Activities**

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
<b>No Data Entered/Not Applicable !!!</b>						
<a href="#">View File</a>						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Every year students elect their representatives to form the College Students Union and their respective association secretaries through the college union election. The college provides a college union fund, which is collected from the students for the union activities along with the first instalment of tuition fees at the beginning of each academic year and the same is credited to the college union fund. The college union has an Executive Committee consisting of: ? Chairman ? ViceChairman (Reserved for Lady) ? General Secretary ? Representative to the University Union (Two Members) ? Editor of the College Magazine ? Arts Club Secretary ? Secretary of Sports ? One member representing the students of each year elected by the students of respective year among themselves ? Two lady representatives elected by the lady students of the college from among themselves. ? Association Secretary for each department. ? One member representing the students belonging to the SC/ST, to be nominated by the Executive Committee, in case of none of the elected members belong to SC/ST ? Honourable Treasurer and Staff Advisor(Exofficio) In addition, they select the representatives and office bearers of Students Welfare Committee and Student's Affairs Committee. The college has various academic and administrative bodies that have student representatives in them as given below:

(a) Internal Quality Assurance Cell (IQAC) (b) College Union (c) Course Committee (d) Hostel Management Committee (HMC) (e) Students Welfare Committee (SWC) (f) Students Affairs Committee (SAC) (g) National Service Scheme (NSS) (h) Career Guidance and Placement Unit (CGPU) (i) Students Grievance Cell (j) Women Cell (k) Library Council (l) Energy Management Cell (m) Environment Management Cell

**5.4 – Alumni Engagement**

5.4.1 – Whether the institution has registered Alumni Association?

Yes

The name of the Association shall be " The TKM College of Engineering Alumni Association" registered as per the provisions of Travancore Cochin Literary Scientific and Charitable Societies Act 1995. The objects of the Association are : a. To maintain the contacts of the Alumni with the almatater. b. To foster the relationship between the past and the present student of the Institution. c. To keep the old students informed of the growth and development of the Institution. d. To give an opportunity to the old students of the Institution to take part in the responsible task of the building up and maintaining the traditions of the Institution. e. To serve as a forum striving to get a proper blending of the theoretical and practical aspects of Engineering. f. To sponsor prizes, Scholarships, book banks etc. for the students of the college. g. To help the students passing out of the college in securing employment consistent with their qualifications. All the past students of the College are eligible to become members of the Association. There are five classes of members namely Patrons, Life Members, Ordinary Members, Honorary Member and Associate Members. Patrons, Associate Life Members, Honorary Members and Associate Members can enjoy all the privileges of the association except that of voting at the Annual General Body Meeting. During any year the Association shall consist of all the Patrons, Life Members, Ordinary Members, Honorary Members, Associate Life Members and Associate Members. The affairs of the Association is managed by an Executive Committee consisting of a President, A Chairman, Four Vice Presidents, Two Secretaries, a Treasurer and sixteen other members. The Executive Committee shall have the power to constitute Sub Committees to further activities of the Association. The Principal shall be the Ex Officio President of the Association. The Chairman is elected from amongst the past students. Three Vice Presidents are elected from amongst the past students and the other Vice – President from among the Teaching Staff of the College. One Secretary is elected from amongst the past students and the other from the Teaching Staff of the College. The Treasurer is elected from the Teaching Staff of the College. All classes of members shall be eligible for election as members of the Executive Committee. All the Office bearers of the Association shall be elected once a year at the Annual General Body Meeting of the Association which shall be held normally on January 26th of the academic year of the College. Students of the final year class of the College get themselves enrolled as members of the association by paying the entrance fee and the annual subscription for the next year.

5.4.2 – No. of enrolled Alumni:

700

5.4.3 – Alumni contribution during the year (in Rupees) :

594436

5.4.4 – Meetings/activities organized by Alumni Association :

1. Annual General Body Meeting 2. Merit Evening, Alumni Day 3. BacktoHome Programme in connection with Kerala Flood Relief Activity.

## **CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 – Institutional Vision and Leadership**

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

The following points may be noted with regard to the operational autonomy of individual departments: 1. The Department is headed by the HoD, who is assisted by the Academic Coordinator in curricular matters. 2. The Department Management

Committee (DMC) is an active body in the department to decide on important academic and disciplinary matters of the department. 3. The Department prepares the budget and submits for the approval of the Central Planning Committee. 4. The Departments are given a corpus fund for their emergency expense and the HOD has the power to decide the expenditure. 5. Each laboratory is managed by two faculty members who function as the lab in charge and assistant lab in charge. Technical staff is also allotted to each lab. 6. Each batch of students has a Senior Advisor and four/ five junior advisors, to support the curricular and personal matters. The Senior Advisor, through Class Committee Meetings, ensures that the classes are conducted well. 7. Feedback from staff and students is collected through various forums to decide on the electives to be offered, monitor the pace of subject coverage, improve the quality of the classes, industrial interactions, etc. and corrective actions are taken, if needed. 8. Cocurricular and extracurricular activities function through clubs/ committees/ cells/ chapters and enjoy autonomy in their operations. 9. The Career Guidance and Placement Unit (CGPU) was restructured with more involvement from the individual academic departments. A four tier structure was formulated with more participation from the Management, Department, and students

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	? The syllabus and curriculum designed by APJA Kerala Technological University (APJAKTU) is followed. ? The senior faculty members play major role in APJAKTU committees for syllabus revision.
Teaching and Learning	? The course committees and subject groups formed evaluate the teaching learning process. ? Structured evaluation of teachers by students. ? Remedial classes for students. ? Taken feedback from stakeholders periodically. ? Students encouraged to participate in conferences, workshops, technical fests organized by other institutes and professional societies. ? Study tours or industry visits for learning beyond the curriculum. ? Professional society activities ? The institute impart quality education by encouraging elearning facility through NPTEL lectures, QEEE classes etc. ? Learning through FAB Lab and activities of Innovation Entrepreneur Development Cell. Promote internship in reputed institutes and industries
Examination and Evaluation	? The internal tests are conducted by the institution as per the guidelines of APJAKTU. ? The end semester examinations are conducted by APJAKTU at the institution. ? The institute is

	a Centralized Valuation centre for UG and PG programmes.
<b>Research and Development</b>	? Promote research of faculty under QIP at premier institutes. ? Fulltime and Parttime Ph.D. research scholars are guided by faculties. ? The institute is a QIP research centre. ? Signed MoUs with industries, research organizations and universities of India and abroad. ? Received infrastructure developments from various funding bodies (MODROBS, RPS, DST/ISRO Projects).
<b>Library, ICT and Physical Infrastructure / Instrumentation</b>	? Wellequipped library with elearning facility. ? Subscribed to renowned International Journals. ? Physical infrastructure is updated frequently based on various needs.
<b>Human Resource Management</b>	? Recruitment of faculty and staff is done by an interview board consisting of members representing Kerala Government, APJAKTU, External Subject Expert chosen by Directorate of Technical Education, Management etc., as per the guidelines of AICTE and Government of Kerala. ? Follows career advancement policies framed by the Government of Kerala. ? Pay revisions as per the norms laid down by AICTE and Government of Kerala.
<b>Industry Interaction / Collaboration</b>	? Conducts Expert lectures by industry personnel. ? Projects of students are guided by industry experts. ? Industry related issues are solved as projects by students and faculty. ? Students' internship in industries and reputed institutions. ? Installed Testing centre/ Research centre funded by industries. ? Continuous industry linkage by CGPU for career guidance activities.

#### 6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
<b>Administration</b>	Internal messaging service to communicate with the employees.
<b>Finance and Accounts</b>	? SPARK web portal by Govt. of Kerala (spark.gov.in)
<b>Student Admission and Support</b>	? Linways (tkmce.linways.com)
<b>Examination</b>	? Internal examination e-governance using Linways ? University examination e-governance using APJAKTU portal

### 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee

of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
<b>No Data Entered/Not Applicable !!!</b>				
<a href="#">View File</a>				

6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
<b>No Data Entered/Not Applicable !!!</b>						
<a href="#">View File</a>						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
<b>No Data Entered/Not Applicable !!!</b>				
<a href="#">View File</a>				

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
12	12	16	16

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
<b>Group Insurance, Provisional Fund, GPAI Scheme, State Life Insurance, NPS (National Pension Scheme), FBS (Family benefit scheme)</b>	<b>Group Insurance, Provisional Fund, GPAI Scheme, State Life Insurance, NBS (National Pension Scheme), FBS (Family benefit scheme)</b>	<b>SBI General Insurance</b>

## 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

**The institution has three types of audits: 1. Internal audit by a Chartered Accountant firm. 2. Audit by the Directorate of Technical Education, Government of Kerala, Thiruvananthapuram. 3. Audit by the Office of the Accountant General, Government of India, Thiruvananthapuram. The above three audits are done yearly by the concerned. No major irregularities have been raised by the authorities. In addition to this, the institution is having consultants to give an opinion on taxation and legal issues.**

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
<b>No Data Entered/Not Applicable !!!</b>		
<a href="#">View File</a>		

6.4.3 – Total corpus fund generated

30074962
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## 6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
<b>Academic</b>	<b>Yes</b>	<b>APJA Kerala Technological University</b>	<b>Yes</b>	<b>IQAC</b>
<b>Administrative</b>	<b>Yes</b>	<b>Directorate of Technical Education (DTE) and Accountant General (AG)</b>	<b>Yes</b>	<b>IQAC</b>

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

1. Publication grant/ assistance for international travel to students 2. Back to Home Project: The PTA Executive committee held on 3rd September 2018 has decided to construct houses for flood hit areas of Kerala with financial support from the TKMCE Alumni Association. 3. Support for Students to participate in SAE BAJA 2019: The students groups were provided support to participate in the SAE BAJA 19 and national level tractor design competition 2019. 4. Smart India Hackathon 2019: Five students from the departments of Computer Science and Engineering, Electrical and Electronics Engineering (EEE) and ECE were given support to participate in Smart India Hackathon 2019 held in Guwahati in March 2019. 5. Support to College Union: The college Union was provided with enough financial support to conduct the Hestia 2019. 6. Financial assistance to other student activities: Ten pointers in second semester Civil Engineering examination 2018 were awarded books with finance provided by the PTA. 7. Financial assistance to faculty: Financial assistance was provided to the faculty who accompanied the students for ACM Coding competition held in the Ahmadabad University, Gujarat. Financial support was provided to faculty accompanying the Sri Lanka tour from the Department of Architecture. The faculty members in Communicative English were supported to present paper in the international seminar at Christ University Bengaluru in March 2019. Faculty from the Department of Mechanical Engineering was supported to visit three Malaysian Universities for the purpose of international Collaborative research agreements. 8. Support General Facilities of the college: Network facility to the AICTE room by optical fiber cable connection was made with assistance from the PTA. The bus committee was given support to purchase battery and tyres and pay insurance to the college bus. Financial support was provided by the PTA to install eight CCTV Cameras in the college auditorium and so on. 9. Repair and maintenance works: The Air Conditioner of PTA Hall was repaired using the PTA fund. Maintenance and repair of the ceiling of Department of Architecture, Servicing of water cooler of Central Library, Electrical maintenance work in the main block, and placement cell and maintenance work of generator were

carried out by support from PTA. Plumbing and electrical maintenance works were supported for the Hydraulics lab and staff room of the Department of Mechanical Engineering. 10. Financial Assistance to Departments: Cost of power boards to Electrical and Electronics Engineering Department to provide temporary connection in flood affected (2018 flood) areas of Budhanoor and Pandanadu was met from PTA.

6.5.3 – Development programmes for support staff (at least three)

- Regularly conducts training programs for staff to operate and maintains the lab facilities, in order to expose them to all the equipment in their corresponding domain.
- Training is regularly given in the respective labs for newly joined technical staff
- Training is given in state of the art equipment and software to all instructors
- Technical staff is financially supported to undergo training on their specialization in Professional Training Institutes and companies.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

- Activities to enhance research collaboration with national and international organizations and institutions are initiated.
- Encourages all Departments to enhance professional body activities to reach the technical expertise to the society
- Academic management system based on outcome based education implemented.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	No
d) NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2018	Academic Audit (Internal and External)	23/11/2018	23/11/2018	06/12/2018	4000
2018	NAAC AQAR submitted	20/12/2018	20/12/2018	19/12/2019	4000
2019	New AMS Implementation	14/01/2019	14/01/2019	31/12/2019	8000
2019	Revised Student Academic Record Format	01/01/2019	01/01/2019	31/12/2019	4000
2019	Initiated Students Portfolio	01/03/2019	01/03/2019	31/12/2019	4000
2019	NBA Visit	02/03/2019	02/03/2019	02/03/2019	1500
2019	Student Satisfaction	13/06/2019	13/06/2019	26/06/2019	4000



2018	1	1	25/05/2018	1	Harijan school painting	Cleaning and painting of School	50
2018	1	1	09/06/2018	1	Plastic reuse workshop	Reduce plastic products.	55
2018	1	1	28/06/2018	1	Swachh bharat summer internship orientation phase 1 and 2	Necessity of keeping environment clean and green.	40
2018	1	1	05/08/2018	1	Dress collection	Provide dresses to camps where flood relief activities are going on	36
2018	1	1	15/08/2018	1	Clean campus green campus	Necessity of keeping environment clean and green.	30
2018	1	1	17/08/2018	2	Collectorate flood work	Provide assistance in flood relief camps.	35
2018	1	1	18/08/2018	1	Flood relief collection drive	Provide materials to flood relief camps	35
2018	1	1	02/10/2018	1	Ashramam cleaning swachh bharat	Cleaning of beach in kollam.	90
2018	1	1	04/11/2018	2	Home for homeless	Constructing house for homeless people	25

7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
College Handbook	02/07/2018	Released in 2016 and updated each year.

### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Walking With Angels : Outing With The Autistic Kids.	14/04/2018	14/04/2018	35
Harijan School Painting: Renewed Harijan School Kuttichira	25/05/2018	25/05/2018	200
Sapling Planting	05/06/2018	05/06/2018	100
Plastic Reuse Workshop	09/06/2018	09/06/2018	50
Dress Collection	05/08/2018	05/08/2018	100
Flood Relief Collection Drive	18/08/2018	18/08/2018	200

### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

There are devoted staff to maintain the campus, gardens and buildings. Apart from this, students also organise many activities to impart the sense of cleanliness and ecofriendliness to every student of the campus. Few activities done by students in the campus during the year 201819 are: • Paper Segregation by NSS • Seed Pen Distribution • April Cool • Swachhta Pakwara Campus Cleaning • Sapling Plantation in the college Campus on Environmental Day • Oru Tharu: Lakshmi Tharu sapling distribution.

## 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

- A robust mentoring system with one faculty advisor for a group of 30 students
- Endowments/Scholarships instituted by retired faculty and alumni
- Meritcummeans scholarship for deserving students from exclusive contribution from a monthly salary of every staff of the college
- Students are encouraged and are financially supported for undertaking Internships and participating/presenting papers at Internationally acclaimed Universities/Conferences.
- Humanitarian activities are undertaken by the students and faculty of various Departments in collaboration with various professional organisations.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<http://tkmce.ac.in/internal-quality-assurance-cell-igac.html>

## 7.3 – Institutional Distinctiveness

### 7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

The institute aims for Research collaboration with foreign and Indian universities and to establish research centers to promote research. Step are taken organise technical conferences and faculty / staff development programmes MoU's are signed to promote the same. The institute focuses on the activities of Professional bodies as platforms for utilising the technical knowledge for the betterment of the society. The students are also encouraged to participate in national level competitions to improve skill and enable selflearning of new technologies, nurture creativity and improve interpersonal skills. To name a few, Efficycle, SAE Baja, Hackathons etc. Sustainable homes were constructed as

a part of BackTo Home project in flood affected areas for the rehabilitation of the underprivileged, incorporating cost effective and modern technical design aspects. The knowledge acquired in the classes were implemented by the students after doing research with socioeconomic and environmental perspective. Induction Programme inline with the guidelines of AICTE are arranged for faculty and students to imrove the teaching learning process.

Provide the weblink of the institution

[www.tkmce.ac.in](http://www.tkmce.ac.in)

### **8.Future Plans of Actions for Next Academic Year**

1) Enhance research activities through funded projects and collaborative research with national and international institutions and organizations. This helps to improve research facilities and consultancy works. In order to enhance research, we plan to setup the following interdisciplinary research labs in the next academic year. They are i. Robotics Lab in association with eyantra lab setup initiative of IIT Bombay. ii. Artificial Intelligence / Machine Learning lab. iii. Research Lab on Sustainable Energy 2) Make programs and the college prepare for the next accreditation cycle (both NBA and NAAC). 3) Enhance activities of professional bodies/associations in order to improve the overall development of students. This can help to improve placement and higher education possibilities for students. 4) A civil service corner in library is proposed to setup to encourage the students to prepare for civil service exams. 5) A convention center with students amenities facilities to be built in the coming academic year. 6) As a part of ASAP (Advanced Skill Acquisition Program) by Kerala State Infrastructure limited, setting up of hitech classrooms is in progress for upgrading the skills of students.