

# **IQAC**

***INTERNAL QUALITY***

***ASSURANCE CELL***

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# 1. Profile

The IQAC was established during 2014 and is acting as a nodal agency of the institution for coordinating quality-related activities and it works on the basis of the guidelines set forth by NAAC. **Quality enhancement and assurance is the benchmark of this institution.** Thus the prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the performance of institution. For this purpose twenty four different entities has been formed under this cell and each entity or component works for improving and upgrading the quality of overall functioning of the college by analysing existing practices and suggesting modification or improvement to IQAC. IQAC then evaluates the feasibility of suggestions and implement them based on merit .The quality is maintained at every stage by continuous evaluation of quality benchmarks/ parameters for various academic and administrative activities.

## Composition.

### Core Committee

1. Dr. Amar Nishad (Principal) - Chairman
2. Dr. Rekha Lakshmanan (Vice Principal)
3. Adv. Majeed Parakkadan (Secretary KMEA) - Management Representative.
4. Dr. Bijesh Paul (HOD, ME) - Coordinator
5. Prof. Sunitha Rani C.M (HOD, CE) - Co Coordinator.
6. Prof. Shaila C.K. (HOD, EI) - Core committee member.
7. Prof. Veena K Viswam -Core committee member

### Members

8. Prof. Fareeda K Kareem -Academic council & Board of studies
9. Mohamed Fayaz (CEO, Sunsenz) -Industrialist
10. Abdul Jabbar - PTA representative
11. Anton -Alumni representative
12. Prof. Sumi Bose - Academic Monitoring & Discipline

13. **Dr. Benny Joseph** - **KMEA Innovation Council**
14. **Dr. Reena Sebastian** - **CGPU**
15. **Prof. Ajmal** - **Placement officer**
16. **Prof. Sony Syed** - **Audit cell**
17. **Prof. Rashida Hameed** - **Staff welfare**
18. **Prof. Nazeema V.A** - **Exam cell**
19. **Prof. Bindu Sebastian** - **TEP Cell**
20. **Mr. Yosuf K.A** - **Administration**
21. **Prof. Jinu V.R** - **Infrastructure**
22. **Prof. Tom Joseph** - **Physical Education**
23. **Prof. Smitha K.M** - **Student welfare**
24. **Prof. Mohammed Fazal** - **Canteen**
25. **Prof. Vidya Hari** - **Hostel and Accomodation**
26. **Mohammad Ajmal** - **Transportation**
27. **Prof Resmi G.** - **Campus Beautification and Cleaning.**
28. **Prof Midhun Mohan** - **College Community Service**
29. **Prof. Haneesh K Shams** - **Campus Safety & Security**
30. **Dr. Raseena Rasheed** - **KMEA Social Empowerment cell**

## **2. Objectives**

- The primary aim of the IQAC is to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.
- To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.
- To promote the college into a centre of excellence in academics and research.

### **The IQAC shall have the following functions:**

- Development and application of quality benchmarks/ parameters for the various academic and administrative activities of the College.
- Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- The feedback system of the institution invites suggestions to improve academic activities and IQAC carries out a detailed analysis of the suggestions procured from the different stakeholders of the institution.
- Dissemination of information on the various quality parameters of higher education.
- Organization of workshops, seminars and faculty development programmes for the development of students and faculty.
- Documentation of the various programmes / activities of the college, leading to quality improvement.
- Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of best practices.
- Preparation of the SSR as per guidelines and parameters of NAAC, to be submitted for accreditation.
- IQAC acts as the Documentation and Record-Keeping Cell, including assistance in the development of the self-appraisal for faculty. In order to facilitate the process, all teachers shall submit the duly filled in proforma to the IQAC annually.
- Inculcating an aptitude for research among faculty and students by promoting quality research activities. Faculty will be encouraged to publish in refereed and peer reviewed journals, and the output of student's research is promoted by means of dissertation, thesis or research reports.
- Fostering global competencies among students by initiating them to undertake online

graduate / postgraduate courses.

- To stimulate outreach programmes, curricular and co-curricular activities with an aim of effectuating holistic development in students and also to instil a sense of social commitment among them, consequently leading to national development.
- Provides suggestions to the higher bodies regarding the development of a well-planned infrastructural facilities and amenities, which is a pre-requisite for progress.
- Promoting the use of technology based education by means of smart class rooms.
- Encouraging self-evaluation and accountability by means of self-appraisals.
- Facilitating periodic assessment through the conduct of Academic Administrative Audit.

## **Strategies**

### **IQAC evolves effective strategies for the following:**

- To assess the performance of academic, administrative and financial activities and to improve the efficiency of each task.
- Incorporating optimal and modern methods of teaching, learning and evaluation so as to improve the quality of teaching learning process.
- To create an effective feedback system comprising of the different stakeholders of the institution.
- To ensure the self sufficiency of outgoing students through a three way approach namely **placement or higher studies or start ups**
- To enhance the social commitment of students through **KMEA Social Empowerment Cell**
- To promote innovation and start-up eco system among students through **KMEA Innovation Council**

### **Various benefits of IQAC are:**

- To enhance the quality of academic, administrative and financial aspects of the institution.
- To provide a documentation basis for decision making in improving institution functioning.
- To act as a catalyst of change in institution
- Build an organised methodology of documentation and internal communication
- To promote International Knowledge Exchange Programmes.
- Automation of Admission Processes-Provision for online fee payment
- Automation of Exam cell.
- MOUs with premiere industries

### 3. Teaching Learning Process

1. Allotment of the subjects to the faculty by HODs as per their specialization.
2. Preparation of teaching plan and course plan along with correlation to the Course Outcomes (COs), Program Outcome (POs) and Program Specific Outcome (PSOs).
3. Preparation of Course file which contains university syllabus, previous year question papers, series test question papers, assignment questions, their answer key, slow learner activity schedule.
4. Verification of the course file by HOD and Auditor.
5. Conduct series test, assignments, seminars as a part of the internal assessment of students.
6. Conduct result analysis of series tests.
7. Identification of slow learners and medium learners from result analysis and conduction of remedial classes.
8. Conduction of advanced courses like NPTEL and GATE coaching for higher learners.
9. Conduct parent teacher meeting and open house after each series test to inform parents about academic progress and behavioral pattern of students.
10. Advisory committee, Class Committee and course committee meeting to review the teaching learning process.
11. Analyze the feedback from students to assess the teaching and to implement any corrective measures.
12. Semester wise result analysis of University exams.
13. Conduction of invited talks by faculties of eminent institutes for students and faculties to enhance their knowledge in specific domains
14. The seminars and workshops conducted for the faculty and students
15. Establishment of research cell in order to encourage research activities.
16. Conduction of various activities by KMEA innovation council to promote Entrepreneurship and start-ups.
17. Conduction of invited talks by young budding entrepreneurs to motivate the culture of innovativeness among our students.

## 4. Methodology of operation

The Academic Council consisting of the principal, the vice principal and a senior faculty as coordinator, is a central body that plans, monitors and reviews teaching learning and other activities of the institution. Further an academic monitoring committee monitors the implementation of the academic activities with a faculty given the charge of a specific class. All newly admitted students have to compulsorily attend the orientation programme and invocation ceremony in which they are made aware of the teaching learning process, the system of continuous evaluation, compulsory core courses, various co-curricular activities, discipline and culture of the institute. All students are also given a guided tour of the campus and the various facilities. The suggestion / complaint box is placed as to get the feedback of the students. Suggestions are considered while framing policies related to the institution. Students are apprised of the academic calendar, time table, programme structure, syllabi of the courses before the semester commences. Department council meeting and department advisory committee meetings are held regularly to plan, monitor and implement the teaching learning process, new add on courses, workshops, seminars, invited talks in relevant domains of the department under the guidance of IQAC. Further course committee meetings and class committee meetings are conducted in periodic intervals to gauge the effectiveness of teaching learning process through representative feedback from students.

The institution has an effective monitoring system for the development of students of various background and abilities. The aim of each department is to make students to face all challenges in the engineering field. We have an effective monitoring system in which students are categorised into three bands based on their performance in previous university exams and series exams. For slow learners, special remedial classes are conducted beyond the regular class hours to improve their performance. Further residential remedial classes are conducted for slow learners after the end of last working day. Here students are allowed to stay back in the college so that faculty will be giving individual attention to these students. The classes start at 8.30am and ends at 8.30pm with intervals for lunch, tea and for physical activities are provided. Such classes are usually conducted for about one month and students go to write exam from the college thereby invoking the memories of old Gurukul system where sishya stays with guru during the period of study. Such measures has reduced the number of back papers of slow learners and further transforming from slow learners to medium level. For advanced learners, separate classes for GATE and other training programs are given. To improve the technical skill of the students various workshops, internship programs and invited talks are carried out in all departments. Value added courses are provided to advanced learners for improving their skill for job acquisition. Further students with excellent academic records are only allowed to compete for different positions of the



college union thereby giving a message to students to perform well. Academic toppers of each batch of each department are honoured annually by the college.

IQAC collects institutional informational feedback from students regarding faculty programmes, institutional programmes, infrastructural facilities etc. Further at the end of the semester, feedback is collected from students of each faculty to evaluate the teaching learning process of their course. Steps are taken to improve overall performance of the college by analysing the feedback from the students.

## **5. Minutes & ATR**

The IQAC meeting minutes and action taken report during 2014 – 2019 are attached.

[Minutes & ATR](#)

## 6. Activities by IQAC

Average number of quality initiatives by IQAC per year for promoting quality culture

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from – to)	Number of participants
2014	TRANSFORMATION TO KTU-RULES & REGULATION	22/7/2014	ONE DAY	80
2014	TECHFEST-VELOCIS 2K14, EXPO	13/3/2014, 14/3/2014	2 DAYS	180
2015	TECHFEST-KAPRECIOUS 2K15	20/3/2015, 21/3/2015	2 DAYS	180
2015	CAZA TECHNICA	22/9/2015	1 DAY	37 teams, 180 students for technical talk
2015-16	HANDS-ON WORKSHOP FOR OSCAD	20/02/2016	1 DAY	20
2015-16	TWO DAY WORKSHOP ON INTERNET OF THINGS	09/05/16 & 10/05/16	2 DAYS	20
2015-16	INNOVATIVE IDEA PRESENTATION AND WORKSHOP ON INTERNET OF THINGS	11/03/15 & 12/03/15	2 DAYS	30
2015-16	WORKSHOP ON MICROCONTROLLERS	29/03/16 & 30/03/16	2 DAYS	30
2015-16	BRIDGE COURSE ON ELECTRONIC PRODUCT DESIGN	February – April 2016	3 MONTHS	20
2016	WORKSHOP ON NDT AND INSPECTION	28/09/16	ONE DAY	125
2016	WORKSHOP ON ENGINE ASSEMBLY AND TROUBLE SHOOTING IN AUTOMOBILE SYSTEM	28/09/16	ONE DAY	40
2016	TALK ON NUMERICAL METHODS IN MECHANICAL ENGINEERING	23/09/16	ONE DAY	35
2016	A BRIEF INTRODUCTION TO LATEX	09/02/2016	ONE DAY	30
2016	INTRODUCTION TO OPEN FORM CFD SOFTWARE	29/08/16 - 2/09/16 & 05/09/16 – 09/09/16	NINE DAYS	40
2016	INTRA COLLEGE QUIZ COMPETITION-KURUKESHTRA	30/08/16	ONE DAY	50

2016	WORKSHOP ON FIRE AND SAFETY CONCERN IN EDUCATIONAL INSTITUTIONS	26/2/16 - 27/2/16	TWO DAY	50
2016	SEMINAR ON SAFETY PRACTICES IN CONFINED SPACE	25/02/16	ONE DAY	50
2016	WORKSHOP ON CFD	15/01/16 – 14/02/16	30 DAYS	30
2016	TWO DAY WORKSHOP ON ELECTRICAL SYSTEM DESIGN	16-02-2016 & 18-02-2016	3 DAYS	46
2016	ONE DAY WORKSHOP ON ELECTRICAL CAD	19-03-2016	1 DAY	40
2016	ONE DAY WORKSHOP ON ELECTRICAL CAD	30-07-2016	1 DAY	38
2016	COUNSELING AND MOTIVATION PROGRAM	20-8-2016	1 DAY	38
2016	COUNSELING AND MOTIVATION PROGRAM	20/8/2016	1 DAY	30
2016	CAREER TRAINING PROGRAM	09/03/2016	1 DAY	25
2016	TALK ON TIME MANAGEMENT AND CAREER OPPORTUNITIES	22/09/2016	1 DAY	75
2016	TECHNICAL WORKSHOP	04/02/2016	1 DAY	120
2016	ONE DAY WORKSHOP ON CYBER FORENSIC ETHICAL HACKING	18/2/2016	1 DAY	180 students
2016	TECHNICAL TALK ON SOCIAL NETWORKING AND LATEST TRENDS IN COMPUTER SCIENCE	27/7/2016	1 DAY	180 students
2016	HANDS ON WORKSHOP ON DATA MINING AND BASICS OF PYTHON	11/8/2016	1 DAY	26
2016	TWO DAY WORKSHOP ON ANDROID APPLICATION DEVELOPMENT	22/9/2016 , 23/9/2016	2 DAYS	34
2016	TEKLA WORKSHOP	10/06/2016	1 DAY	10
2016	INTER COLLEGE QUIZ COMPETITION- ASTHRA	15/10/16	1 DAY	External: 4 Internal: 8
2016	FDP ON INNOVATIONS IN DIFFERENT FIELDS IN CIVIL ENGINEERING	20/02/16	1 DAY	External: 2 Internal:22
2016	FDP- TRAINING ON TOTAL STATION SURVEYING	27/08/16	1 DAY	Internal: 23
2016	RESULT IMPROVEMENT STRATEGIES	01/10/2016	ONE DAY	85

2016	TALK ON CAREER SPECIALIZATION IN ELECTRONICS AND INSTRUMENTATION	29/2/16	1 DAY	75
2016	WORKSHOP ON INDUSTRIAL AUTOMATION	9/3/16	ONE DAY	30
2016	AN INTRODUCTION TO LAB VIEW-	21/2/16	1 DAY	35
2016	TALK ON PIC PROGRAMMING	11/2/16	1 DAY	65
2016	WORKSHOP ON ADVANCED INDUSTRIAL AUTOMATION-	14/3/16 to 16/3/16	3 DAYS	35
2016	WORKSHOP ON PCB DESIGN ON	3/3/16	ONE DAY	35
2016-17	WORKSHOP ON NETWORK SIMULATION AND DESIGN	30/11/2016	1 DAY	15
2016-17	WAVE CLONING	20/03/2017	1 DAY	15
2016-17	SEMINAR ON EMI/EMC	07/04/2017	1 DAY	5
2016-17	WORKSHOP ON SDR	28/04/2017 & 29/04/2017	2 DAYS	10
2017	SCOPE AND CAREER IN QA/QC	19/08/17	ONE DAY	100
2017	WORKSHOP ON MECHANICAL ELECTRICAL AND PLUMBING DESIGN AND DRAFTING	20/08/17	ONE DAY	90
2017	WORKSHOP ON NDT AND INSPECTION	28/03/17	ONE DAY	60
2017	WORKSHOP ON MECHANICAL ELECTRICAL AND PLUMBING DESIGN AND DRAFTING	'20/08/17	ONE DAY	60
2017	PLACEMENT ENHANCEMENT METHODS	15/2/17	ONE DAY	30
2017	COUNSELING AND MOTIVATION PROGRAM	08/11/2017	1 DAY	30
2017	ONE DAY WORKSHOP ON ANDROID APPLICATION DEVELOPMENT	24/01/2017	1 DAY	30
2017	WEB DESIGNING WORKSHOP	19/8/2017	1 DAY	50
2017	FDP ON GRAPH THEORY AND COMBINATORICS	25/07/2017, 26/07/2017	2 DAYS	21
2017	TRAINING ON REVIT ARCHITECTURE BY AUTODESK	17/02/17	1 DAY	25

2017	3D VISUALIZATION - CADD TRAINING PROGRAMME	20/02/17	1 DAY	30
2017	CADD TRAINING PROGRAMME	21/03/17	1 DAY	35
2017	AWARENESS PROGRAMME ON BMS AND MEP	27/03/17	1 DAY	50
2017-18	HANDS ON WORKSHOP FOR SPICE	20/11/2017	1 DAY	12
2017-18	HANDS ON WORKSHOP ON EMBEDDED SYSTEM	11/8/17 & 12/08/17	2 DAYS	20
2017-18	HANDS ON WORKSHOP ON INDUSTRIAL AUTOMATION	09/02/2018	1 DAY	15
2017-18	TWO DAY WORKSHOP ON INTERNET OF THINGS	15/02/18 & 16/02/18	2 DAYS	20
2018	NAAC ASSESSMENT AND ITS PROCEDURES	20/12/18	ONE DAY	80
2018	INVITED TALK ON IPR	18/12/18	ONE DAY	85
2018	TALK ON IMPORTANCE OF SAFETY IN CURRENT INDUSTRIAL SCENARIO	16/11/18	ONE DAY	60
2018	QA/QC AND MEP WORKSHOP	23/10/18	ONE DAY	60
2018	INTERACTIVE ACTION ON CAREER MAPPING SKILLS IN THE AREAS OF MARINE, OIL AND GAS SECTOR	04/12/2018	ONE DAY	60
2018	SEMINAR ON INDUSTRIAL ORIENTED MECHANICAL SOFTWARE AND ITS APPLICATION	21/02/18	ONE DAY	10
2018	TALK ON ELECTRICAL ENGINEERING, TODAY AND TOMORROW	27/11/2018	1 DAY	77
2018	HANDS ON WORKSHOP ON ETHICAL HACKING	19/2/2018 , 22/2/2018, 23/2/2018	3 DAYS	180
2018	CADDQUEST- ALL INDIA SCHOLARSHIP TEST	31/01/18	1 DAY	20
2018	LUMION DESIGNING SOFTWARE	02/01/2018	1 DAY	25
2018	3D VISUALIZATION	02/08/2018	1 DAY	70
2018	TEKLA TRAINING AND FREE WORKSHOP AWARENESS	03/12/2018	1 DAY	25
2018	DIPLOMA IN CONSTRUCTION MANAGEMENT AWARENESS	15/03/18	1 DAY	25
2018	BIM- AWARENESS OF REVIT ARCHITECTURE	27/03/18	1 DAY	Internal: 115

2018	POSTER PRESENTATION COMPETITION	04/05/2018	1 DAY	20
2018	WORKSHOP ON CADD, BIM AND FUSION 360	07/09/2018	1 DAY	Internal: 75
2018	INTERNSHIP- QUANTITY SURVEYING	09/07/18 to 18/07/18	10 DAYS	Internal: 81
2018	INTERNSHIP ON TOTAL STATION SURVEY	09/07/18 to 13/07/18	5 DAYS	Internal: 67
2018	3D VISUALIZATION	27/10/18	1 DAY	Internal: 70
2018	INTER DEPARTMENT SEMINAR COMPETITION	23/11/18	1 DAY	Internal: 7
2018-19	SEMINAR ON RECENT TRENDS IN EMBEDDED SYSTEM	28/11/2018	1 DAY	30
2018-19	HANDS ON WORKSHOP ON VLSI	07/03/2017	1 DAY	26
2018-19	HANDS ON WORKSHOP ON CST	18/03/2019	1 DAY	20
2018-19	SEMINAR – MOULD YOURSELF FOR BETTER TOMORROW	08/04/2019	1 DAY	40
2019	NAAC ASSESSMENT AND EVALUATION OF SSR	11/11/2019	ONE DAY	40
2019	EXPERT TALK ON MEP	25/10/19	ONE DAY	30
2019	EXPERT TALK ON FORMATION OF SAE CHAPTER	18/10/19	ONE DAY	50
2019	EXPERT TALK ON RECENT TRENDS ,CAREER TRENDS AND EMPLOYMENT OPPORTUNITIES IN MECHANICAL ENGINEERING	14/10/19	ONE DAY	200
2019	WORKSHOP ON DESIGN AND FABRICATION OF RACING CAR	24/09/19-1/10/19 & 2/10/19-14/10/19	16 DAYS	165
2019	OUTCOME BASED EDUCATION	25/8/19	ONE DAY	80
2019	FACULTY EXCHANGE PROGRAMME FROM MURDOCK UNIVERSITY	1/07/19 – 3/07/19	3 DAYS	40
2019	TECHNICAL TALK ON DYNAMIC CHANGES AND SCOPE OF AUTOMOTIVE SECTOR	29/08/19	ONE DAY	345
2019	TECHNICAL TALK ON INTRODUCTION TO MOTOR SPORTS	19/08/19	ONE DAY	81
2019	TALK ON CAREER OPPORTUNITIES IN OIL AND	21/02/19	ONE DAY	60

	GAS INDUSTRIES			
2019	CO-PO-PSO FORMULATION	02/02/2019	ONE DAY	40
2019	TALK ON INTRODUCTION TO MICRO MACHINING	31/01/19	ONE DAY	40
2019	TALK ON IAS	13/02/2019	1 DAY	21
2019	INDUSTRIAL VISIT	15/02/2019	1 DAY	22
2019	INDUSTRIAL VISIT	16/02/2019	1 DAY	20
2019	TALK ON AUTOMATION	21/02/2019	1 DAY	21
2019	ONE DAY WORKSHOP ON MAKING EXTENSION BOARD	30/03/2019	1 DAY	80
2019	ONE DAY WORKSHOP ON MAKING LED LAMPS	02/02/2019	1 DAY	50
2019	SEMINAR ON LATEST TREND IN INFORMATION TECHNOLOGY AND BIG DATA ANALYTICS	30/1/2019	1 DAY	180
2019	HARDWARE MAINTENANCE BY STUDENTS	16/3/2019	1 DAY	120
2019	WEB PAGE AND POSTER DESIGN COMPETITION	18/3/2019	1 DAY	15
2019	WORKSHOP ON WEB DEVELOPMENT	29/3/2019	1 DAY	30
2019	ONE DAY HANDS ON NVIDIA DEEP LEARNING AMBASSADOR WORKSHOP ON FUNDAMENTALS OF DEEP LEARNING ON COMPUTER VISION	14/5/2019	1 DAY	26
2019	GOOGLE ASSOCIATE CLOUD ENGINEER TRACK	August 2019-December 2019		47
2019	3D VISUALIZATION	02/01/2019	1 DAY	Internal: 102
2019	AWARENESS PROGRAMME ON TEKLA SOFTWARE	02/12/2019	1 DAY	Internal: 103
2019	TICMAT- ADD- ON COURSE ON KMBR	13/02/19 to 14/02/19	2 DAYS	Internal: 81
2019	CIVIL ENGINEERING STUDENTS ASSOCIATION ACTIVITY- TALK ON RECENT INNOVATIONS IN CIVIL ENGINEERING	19/02/19	1 DAY	Internal: 247
2019	LUMION DESIGNING SOFTWARE	03/12/2019	1 DAY	Internal: 101
2019	TEKLA SOFTWARE TRAINING	15/03/19	1 DAY	25



2019	CIVIL ENGINEERING STUDENTS ASSOCIATION ACTIVITY- WORLD WATER DAY CELEBRATION	22/03/19	1 DAY	50
2019	AWARENESS CLASS ON CIVIL CONSTRUCTION COMPANY REQUIREMENTS	04/10/2019	1 DAY	35
2019	PSC AWARENESS CLASS	04/12/2019	1 DAY	25
2019	AWARENESS TALK BY CREATIVE BUILDERS	07/05/19	1 DAY	35
2019	INTERNSHIP ON TOTAL STATION SURVEY	24/07/19 to 26/07/19 & 29/07/19 to 30/07/19	5 DAYS	Internal: 69
2019	INTERNSHIP ON BASICS OF CONSTRUCTION MANAGEMENT AND DRAWING STUDY	30/07/19	1 DAY	Internal: 66
2019	CREATION OF ZERO WASTE CAMPUS- WASTE COLLECTION CAMPAIGN	04/09/19 to 21/09/19	18 DAYS	75
2019	CIVIL ENGINEERING STUDENTS ASSOCIATION ACTIVITY- AWARENESS TALK ON SUSTAINABLE WASTE MANAGEMENT AND CREATION OF A ZERO WASTE CAMPUS	30/09/19	1 DAY	Internal: 308
2019	SEMINAR ON CHANGES IN INDUSTRIAL INSTRUMENTATION.	14/02/2019	1 DAY	Internal: 51
2019	TECHNICAL TALK ON "RECENT TRENDS IN INSTRUMENTATION AND AUTOMATION	13/03/2019	1 DAY	Internal: 51
2019	PROJECT COMPETITION "ZRADDHA" 2019	13/03/2019	1 DAY	Internal: 51 external:25
2019	HANDS ON WORKSHOP ON PLC BASED INDUSTRIAL AUTOMATION.	19/03/19 to 21/03/19	3 DAYS	Internal: 33
2019	SCINTILLA LED WORKSHOP	17/10/2019	1DAY	Internal: 26
2019	TECHNICAL TALK ON ' FUNDAMENTALS OF INSTRUMENTATION ,CONTROL AND AUTOMATION SYSTEMS'	25/10/2019	1DAY	Internal: 62

2018-19	WORKSHOP ON INTELLECTUAL PROPERTY RIGHT	21/12/2018	1DAY	65
2018-19	FDP ON EFFECTIVE TEACHING METHODS	21/07/2018	1DAY	75
2018-19	FDP ON PEDAGOGICAL METHODS	24/11/2018	DAY	70

## **7. Feedback Committee**

A feedback committee has been constituted with Prof Mariya Joy as its coordinator and Prof Nibiya, Prof Raji. Prof Abins Ali, Prof Jesna, Prof Jubairah as its members. The committee collects feedback from various stake holders, analyse the same and will give suggestions as well as remedial measures to IQAC.

### **Feedback**

### **Institutional Feedback**

## 9. Academic and Administrative Audit

IQAC conducts internal and external audits to ensure effective implementation of academic policies for ensuring and sustaining quality as per the University norms. For this purpose, IQAC has designed integrated framework in the form of structured course file and course diary for theory and practical courses, minutes of course committee meetings, class committees meetings and advisory committee meetings. Principal, Head of departments and Academic monitoring committee members evaluate delivery effectiveness of teaching methods using structured documents and procedure framed by IQAC. The knowledge absorption and assimilation by students is constantly monitored as per the IQAC audit procedure. Department audit in charge verifies the course files and other details as prescribed by IQAC. Any corrections to be done will be communicated by Department audit in charge to concerned faculty. The internal audit is usually conducted by faculty members of other departments to prevent chances of favouritism. Further the audit remarks will be handed over to department in charge & IQAC for rectification purposes. This two layer auditing ensures the adherence to quality standards set by IQAC as per University norms. There are two internal audits and one external audit during a semester. The external auditor is assigned by University and after audit a copy of audit report is sent to University by the auditor. Further University sends it to Principal for getting his feedback about the same. The Principal after discussing with IQAC send the report to University. Any remedial measures will be implemented by IQAC as per the feedback received and Principals report.

SL.NO.	ACADEMIC AUDIT (INTERNAL / EXTERNAL)	DATE	REMARKS
1	I <sup>st</sup> Internal Audit	27/10/2015	Conducted Effectively
2	I <sup>st</sup> External Audit	11/11/2015	Conducted Effectively
3	II <sup>nd</sup> External Audit	16/11/2015	Conducted Effectively
4	I <sup>st</sup> Internal Audit	19/06/2016	Conducted Effectively
5	II <sup>nd</sup> Internal Audit	20/09/2016	Conducted Effectively
6	I <sup>st</sup> External Audit	29/09/2016	Conducted Effectively
7	II <sup>nd</sup> Internal Audit	22/11/2016	Conducted Effectively
8	II <sup>nd</sup> External Audit	8/12/2016	Conducted Effectively
9	I <sup>st</sup> Internal Audit	22/02/2017 & 23/02/2017	Conducted Effectively
10	I <sup>st</sup> External Audit	21/03/2017	Conducted Effectively

11	II <sup>nd</sup> Internal Audit	4/05/2017 & 5/05/2017	Conducted Effectively
12	II <sup>nd</sup> External Audit	24/05/2017	Conducted Effectively
13	I <sup>st</sup> Internal Audit	25/08/2017	Conducted Effectively
14	II <sup>nd</sup> Internal Audit	30/11/2017 & 1/12/2017	Conducted Effectively
15	I <sup>st</sup> Internal Audit	14/02/2018 – 16/02/2018	Conducted Effectively
16	II <sup>nd</sup> Internal Audit	25/04/2018 – 27/04/2018	Conducted Effectively
17	I <sup>st</sup> Internal Audit	24/10/2018 – 26/10/2018	Conducted Effectively
18	II <sup>nd</sup> Internal Audit	24/11/2018 – 26/11/2018	Conducted Effectively
19	I <sup>st</sup> Internal Audit	19/03/2019 – 21/03/2019	Conducted Effectively
20	I <sup>st</sup> Internal Audit	9/10/2019 – 11/10/2019	Conducted Effectively
21	I <sup>st</sup> External Audit	07/11/2019	Conducted Effectively
22	II <sup>nd</sup> Internal Audit	10/12/2019 – 12/12/2019	Conducted Effectively

[Academic and Administrative Audit Report](#)

## **10. Strategic Plan**

### **I. Developing a system for industry interaction through MOUs, internships, trainings and programmes.**

1. To collaborate with at least five industries in each programme through MOUs
2. Induction of industry oriented problems and applications as projects of the students.
3. To facilitate the conduction of internships of students at premiere industries.
4. Development of consultancy by all the departments.
5. Conduction of regular invited talk by experts from industry and facilitating interaction between experts, faculty and students.
6. To develop a KMEA Innovation council comprising IIC, incubation centre , IEDC , ARIIA, KDAC & KMEA innovation cell to foster innovation and creativity among students and thereby to apply for IIC ranking conducted by MHRD.
7. To Start techno lab for incubating start-up of KMEAns
8. To conduct idea fest
9. To conduct entrepreneurship meet.

### **II. Enhancing the KMEA continuing education cell to cater to the needs of neighbouring community.**

1. All departments offering UG program should start PMKVY programs to enhance the skill development of neighbouring people.
2. All departments should start ASAP programs in association with government of Kerala.
3. Collaborating with state resource council for providing value added courses to graduated students of all programs.
4. To start B.Voc courses in all departments

### **III. Faculty and Student empowerment programs**

1. To encourage associations of all departments to conduct various programmes so as to improve organizing capacity and leadership qualities of students.
2. To conduct invited talk by experts from premiere academic institutes to enhance advancements in their subject domain.
3. To conduct workshops and seminars for the students at regular intervals.

4. To conduct techno managerial cultural fests for students at Intra College level and inter college level.
5. To promote the participation of students in competitions, seminars, workshops, conferences and tech fests, outside the campus.
6. To conduct induction programme for the faculties at the beginning of each semester.
7. To conduct regular faculty training and empowerment programmes.
8. To conduct FDP at regular intervals.
9. To encourage faculties to attend at least two FDPs in an academic year.

#### **IV. Membership of Professional bodies**

1. All departments should get membership of at least two professional bodies in their domain.
2. The chapter of the professional body in the college should chart out its road map for five years in consultation with its parent body.
3. The various activities charted should be implemented as per the schedule.
4. Regular visit and interaction of the expert or elder from the professional body should be conducted.

#### **V. Streamlining of Career Guidance and Placement unit.**

1. Conduction of invited talk of experts from each program to create awareness about the opportunities in each programme.
2. To start training programmes for various competitive exams like GATE, CAT, GRE, GMAT, IAS etc.
3. To set a target of 60% placement for the eligible students.
4. To conduct semester wise training programme for making the student peaceable.
5. To attract core companies to campus for recruitment.

#### **VI. Development of Research Cell**

1. To produce five research papers for each program of which at least two should be SCI indexed journals.
2. To encourage the students of the department to produce research papers at the end of their project.
3. To provide motivational monetary benefits to students and faculties for producing SCI indexed journal papers.
4. To conduct FDPs in Research Methodology and expert talk in other research areas.

5. To develop a research culture in the college.
6. To encourage existing faculties to enroll for Ph.D. programmes.
7. To set a target of at least one Ph.D holder in every department after five years.
8. To conduct national and international conferences regularly.
9. To introduce new research lab for facilitating research.

## **VII. Activation of IQAC for acquiring NAAC & NBA accreditation**

1. To develop system and processes benchmarking for NAAC & NBA.
2. To set the internal mechanism & HR practices to address accreditation processes.
3. To set up quality assurance network.
4. To Train staffs & students regarding the benchmarking in the accreditation processes.
5. Form criteria committees and criteria co ordinators to prepare the documents related to concerned criteria.
6. To conduct and evaluate presentations of the criteria co ordinators.
7. To suggest modifications and to monitor the implementation of the same.
8. Prepare institutional information for quality assessment
9. Prepare basic information, extended profile and self-study report
10. Ensuring the timely implementation of the same in the portal.
11. To ensure proper reply for any query after the DVV process.
12. To facilitate the visit of accreditation team.



# 11. KMEA INNOVATION COUNCIL (KIC)

## **Objective.**

1. To control all the innovation activities in KM EA Engineering College.
2. Design and implementation of short term courses suitable for boosting start-ups.
3. To establish innovative and startup ecosystem in the campus.
4. To provide data for ranking educational institutions based on innovative and startup activities organized in the institution.
5. To conduct different innovative and start-up activities to enable students to start a start-ups.
6. To provide a platform for performing student's ideation and prototype development needs.
7. To establish skill delivery platforms to link 150 colleges under KTU and to conduct various short term skill courses for students.
8. To plan and conduct projects exhibitions and innovative competitions.

## **Context**

KMEA has formed a KMEA Innovation council (KIC) to plan, coordinate and control all the activities leading to creation of start ups by the students of the college. The purpose is to inculcate the culture of entrepreneurship in our students and thus to transform them as job creators rather than job seekers. It is a mother council which controls the different cells such as

- 1) IIC-KMEA established as per guidelines of MIC- GOVT
- 2) ARIIA-KMEA established as per guidelines of MIC- GOVT of India for ranking educational institutions based on innovative and startup activities organized in the institution
- 3) IEDC KMEA established as per the norms of Kerala start up mission
- 4) Electronic Incubation center (Electronic Startup incubator) established by DIC to perform student's ideation and prototype development needs
- 5) SDPK established by Govt. of Kerala, Kdisc and Kmea Innovation cell.

## **Practice**

1. IIC KMEA has enabled our students to participate in MIC driven activities such as Smart India Hackathon.
2. IIC KMEA also participated in MIC ranking based on the performance of HEIs
3. We participated 18-19 ARIIA ranking process, uploaded all the activities happened in our college.
4. We conducted innovative projects competitions, Ideafests, POC competitions and Exhibitions for school level and college level students.
5. Another notable activity was Entrepreneurs meet conducted where different entrepreneurs motivated the students

### **Evidence of Success.**

1. KMEA is proud to announce that we have six start ups in our campus.
2. KMEA got best IIC ranking with 3 stars in the ratings conducted by MHRD innovation council.
3. Our POC team of Shifana was selected regional wise, national level contest and selected to participate international level in Canada.
4. Our Team Extricator won the third prize in all Kerala project competition conducted by Kerala Technological University namely Teckon-19 and won the best idea award by TCS.
5. Team disaster management won the best open source project award in all Kerala project competition conducted by Kerala Technological University namely Teckon-19
6. We also got high score namely 23.32/25 in Q1 IIC ratings published by MHRD
7. Approval as Advanced Skill Development Centre (ASDC) by Govt of Kerala.

## 12. KMEA Institutional Scholarship

### **i. Objective:**

1. To provide scholarships to the economically backward students.
2. To meet the Semester fee and other fee requirements of needy students based on their economic condition.
3. To improve the commitment of faculty to their students.

### **ii. Context:**

Many students who are admitted to the college comes from economically weaker sections of the society and find it difficult to pay the semester fees. Rising to this situation, the staff of the college decided to contribute a part of their monthly salary towards the scholarship fund. This is in addition to the large amount offered by KMEA management as scholarship and fee waiver to needy students every year. This scholarship of staff of KMEA displays our commitment to the well being of our student community.

### **iii. Practice:**

Each department identifies the needy students. These students are assessed based on their financial background and other factors by a team of staff of our college and Management. For this purpose an amount contributed by each staff as per their wish and consent is collected by the office monthly and is transferred to institutional scholarship fund. A committee comprising of faculty members from each department and headed by a senior faculty monitors the implementation of the scholarship. A part of the tuition fees will be paid from the scholarship fund.

### **iv. Evidence of success:**

An amount of Rs.1,49,620/- has been contributed to the tuition fee for a large number of students which had enabled them to complete the course with this financial assistance.

### **v. Problems Encountered and resource required:**

The number of students in need of the fund is very large and fund is limited.

## 13. Continuing Education cell

The continuing education cell of the college has been contributing to enhancement of the skill development of neighbouring community by conducting skill development courses through ASAP , PMKVY & SRC Programmes. Thus the college is in the forefront of fulfilling its dream of skill enhancement and upliftment of the Socio economic weaker sections of society **as mentioned in its vision**. In order to boost the skill acquisition and employability of the neighbouring community, the KMEA Engineering College has been conducting following courses under the scheme of ASAP, PMKVY and SRC

### ASAP Training programme “CNC OPERATOR- TURNER”

KMEA Engineering college has a well flourished CNC lab, under the department of Mechanical Engineering , where production of machined parts are completed by programming, setting up, and operating a Computer Numerical Control (CNC) machine as per the industrial standards . The course CNC operator conducted under the DAT Scheme has a total 300 hours, where 150 hours is completed with in the college and rest as Industrial Internship. The training sessions enhances various skills in conceptual , process improvement, verbal communication, functional and technical skills, controls and instrumentation, supply management, tooling, coordination, inventory control, attention to detail, judgement which makes them capable to meet industrial requirements. The programme was inaugurated by college principal Dr. Amar Nishad T. M on 16th April 2017 . The skills of the students were assessed by SSC (Sector Skill Council) and was certified by both NSDC and ASAP, Kerala. **The college has signed MOU with Turner Factory to facilitate commercial production using CNC thereby allowing our students to experience real time scenario.**

ASAP aims on becoming an initiative that works with a passionate drive towards equipping the youth of Kerala for the highly demanding industrial roles of today and the future. This student-centered programme works with different industrial sectors to design and update curriculums that inculcate desirable skill sets and qualities to the students to develop a pool of industry ready candidates.

### ASAP Training programme on ‘CCTV INSTALLATION TECHNICIAN’

ADDITIONAL SKILL ACQUISITION PROGRAMME (ASAP), A joint initiative of Higher Education Department and General Education Department, Government of Kerala in association with KMEA Engineering college organised a 200 Hrs training programme, “CCTV Installation Technician” under the DAT(Design align and Train) scheme. Inauguration held on 16th April 2018 at 10.am by college Principal Dr. Amar Nishad T. M The purpose of this training session is to build

a solid working knowledge of various types of surveillance camera, DVR and network devices for online monitoring. This training covered different analog, digital, Hybrid and IP solutions and products. A hands-on exercise on different types of camera & DVR helps the students to build experience on the subjects. The training programme will assess by SSC (Sector Skill Council) and will be certified by both NSDC and ASAP, Kerala. As part of the course, an internship of 150 Hrs is provided to all students in various CCTV companies.

### **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE), Govt. of India. The objective of this Skill Certification Scheme is to enable a large number of Indian youth to take up industry-relevant skill training that will help them in securing a better livelihood. Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL).

KMEA Engineering College has been conducting the course “**CNC OPERATOR- TURNER**” **under PMKVY Scheme**. The challenge of converting unemployed youth into skilled workers is being accepted by KMEA not only as a part of academics but also as our policy of social commitment towards society. Under this scheme, the trainees plan machining by studying work orders, blueprints, engineering plans, materials, specifications, orthographic drawings, reference planes, locations of surfaces, and machining parameters. Programmes as per the plan, setting of work piece is completed and finally the production is completed by machining operation .

### **SRC COURSES**

The State Resource centre, Kerala (SRC, Kerala) was established in 1978, with the ultimate objective of providing academic and technical resource support to all the agencies in the state engaged in Adult and continuing Education programmes. The courses offered under SRC in KMEA Engineering College were NDT, MEP, QAQC and Oil & GAS.

## **14. International Knowledge Exchange Programme**

KMEA Engineering College has conducted a knowledge exchange programme on July 1st & 2nd 2019. Four Environmental engineering Students from Murdoch University, Australia has visited KMEA engineering college campus on 1st July. In view of the activities conducted by KMEANs in the field of environment and sustainability Murdoch university send four students of their environment department to study about the impact of these activities in the nearby community. The team visited several nearby ponds and water sources and collected the samples from these sources and also conducted the analysis of these samples. Thus the visit of the students from an international university Murdoch speaks about the work carried out by the KMEANs in the field of environment and sustainability. Further Murdoch University has offered to continue this Knowledge Exchange programme.

## 15. KMEA SOCIAL EMPOWERMENT CELL

KMEA conducts its activities aimed at empowering society through its social empowerment cell. Institute involves the faculty and students in community work. This helps the students to learn ethical values and understand their responsibilities, and develop as good citizens. College has an active National Service Scheme cell, Pain and palliative care unit and Womens Forum through which different social activities are planned. The various programmes by NSS has conveyed its social relevance to the neighbourhood community. The pain and palliative care unit of the college has lended a helping hand to the neighbourhood community during its period of hardships through its programmes and activities.

### 1.NSS activities

1. 26th January Republic Day- Republic Day is celebrated on January 26 to commemorate the adoption of constitution. Our NSS unit conducts republic day activities on every 26th January.
2. Independence Day: Our students celebrate our independence day on every August 15th by hoisting flags and distributing sweets.
3. 2nd October Mahatma Gandhi Birth Anniversary.- A standout amongst the most main stream events in India and one of the three national occasions, Gandhi Jayanti is praised in our Institute on 2nd October of consistently to stamp the birth commemoration of Mahatma Gandhi. Gandhi Jayanthi is celebrated on 2ndOctober by our students by observing sevanavaram and indulging in social works. NSS day was celebrated by our NSS unit on 24th September.
4. Teachers Day: Our students organize teacher's day celebration on 5th September. An event called Guru Dakshina was organized by students of the college to honor their Principal of plus two schools as a token of respect and gratitude.
5. Children's day: Celebrated on 14th November, the birth anniversary of first Indian prime minister Shri.Jawaharlal Nehru. Our NSS volunteers joined the children's day programme for the special students in Ernakulam region organised by the Centre For Empowerment And Enrichment (CEFEE).
6. Engineer's day was celebrated on 15th September, the birth anniversary of greatest Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya, by Students and faculties by taking a pledge to uphold the ethics & values throughout their career.
7. Flood related activities such as Kunnukara Cleaning Program,Community Activity Manajali Cleaning Programme,Packing of grocery items for flood Victims,Survey at Parakkadav Panchayath.
8. Medically assisted activities like Stem cell donation camps,World heart day walkathon,Medical

college cleaning ,Blood donation camp etc are done under the guidance of team NSS.

9. Environment releavant activities such as Haritha keralam awarness seminar,Haritha kerala mission,Malippuram beach cleaning,Environmental day celebration,tree plantation ceremony,Poster designing competition on HOW CAN WE MAKE OUR MOTHER EARTH HAPPY.
10. Students awareness programmes like Traffic rules awareness class, Road safety awareness programme,Poster designing competition on SAY NO TO DRUGS AND ALCOHOL.

## **2.Pain and Palliative Unit**

1. Home care training & orientation programme at Edathala
2. Participation in the launching of 'SHE' Palliative project
3. Introduction to Palliative Care for first year students by Mr K.J Joseph at KMEA
4. Free medical camp & wheel chair distribution at jannathul uloom madarassa hall -Kaippadamugal
5. Longest Live Caricature Drawing show – Fund raising Initative for charity by Mr Ibrahim Badhusa at KMEA Engineering College
6. Visit to cancer ward- Ernakulam General Hospital
7. “SPARSHAM” – Gathering of Paraplegic Patients at KMEA Engineering College
8. Stem cell camp in association with DATRI (NGO)
9. “KARUNYAYATHRA” - A journey to endosulphan affected areas- Kasargod
10. School Bus project – Wheel chair Transportation

## **3.Womens Forum**

KMEA Engineering College since its inception has been promoting gender equality. More than 80% of the faculties are females and majority of them are from the minority community. Thus KMEA fraternity not only preach gender equality but also practice the same. To promote gender equality and to address the grievances of female students & faculties, a Women’s Forum has been operating in KMEA campus. An awareness programme titled gender equality in work place was conducted on 13.8.2016. A course on safety measures regarding the students about the safety measures to be used at any instant on 14.10.2017 and 15.10.2017. An awareness programme for the male students about the respect and responsibility towards female students was conducted on 13.10.2018. Further our Women’s Forum stood out from the crowd by conducting food festival on gents day.