KG REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
Chilkur (Vill) Moinabad (Mdl) R R Dist.

IQAC Annual Report for the Academic Year 2018-2019

IQAC has been initiating and guiding in the following areas for the continuous improvement in the academic and non-academic processes. By doing so it helps the institution in achieving its goals and to develop excellence in a systematic approach.

1. **Academic Calendar :**

All the departments prepare their respective academic calendars in-tune with the institutional academic calendar planning all the events semester–wise to be conducted. Through the minutes of meeting of Department Advisory Board (DAB) all these activities planned in the academic calendar are continuously monitored for the implementation.

2. **Mentoring :**

At the beginning of each semester the students are divided into batches of fifteen in each and mentors are allotted to guide and mentor them as a continuous observation, this is done fortnightly.

3. **Active Learning Methods :**

To make teaching- learning effective, we implement innovative methodologies such as Think-pair –share, JAM, collaborative learning practice, minute a paper, ice breaking activity etc.

4. **Project Based Assignments :**

To develop creative and innovative ideas the students are encouraged to have hands on experience through project based assignments. All the Departments implemented PBA, Instead of writing assignments students apply their knowledge and design prototypes, to improve their problem solving methodologies by experiential learning. Project based assignment imbibes active and engaged learning. This method inspires students to obtain a deeper knowledge of the subjects. There is a fair chance of retaining the knowledge gained through this method rather than through traditional textbook- centered learning. As it combines team-based and independent work, students become self-driven and confident.

5. **Admission Team :**

Admission Team is formed to improve the quality of freshmen by involving the Intermediate students of surrounding Junior colleges by conducting Science Fares, Project Expo and Poster presentations. We create awareness and train them by organizing on-line mock EAMCET exam.

After joining the institution 3-week Induction program is conducted to acquaint the newly joined students to the Engineering programs, they are exposed to over all development through Yoga, Team Building Activities, Expert Talks, Alumni interaction, Industry Requirements, Human Values and Ethics etc.

To gauge the entry level of the students Diagnostic Tests are conducted in basic sciences after which a bridge course is held to bring them to a level suited for the Engineering studies.

6. Financial Assistance :

To encourage meritorious students who are unable to pay the annual tuition fee due to unfavorable financial conditions, financial assistance is provided to the students on a need-basis. At the start of each academic year, the institution sends out a notification to students who would like to apply for scholarships. Students who qualify for the scholarships are provided financial assistance by a partial or full waiver of their annual tuition. Students are allowed to renew their scholarship if they maintain a good record of academic performance in the previous year. The total number of students benefitted through the financial assistance in this academic year is 127.

7. Alumni :

Alumni form a very strong base in the growth of the institution. We have a track of the alumni since the inception. Every department formed the alumni association through which Seminars, Workshops, Guest lectures are organized to strengthen the institutional Alumni.

8. Difficult subjects :

Difficult subjects are identified based on the previous results, concept/problematic topics we conduct tutorial and remedial classes to overcome the difficulty of understanding of these subjects, in the time table extra hours are allocated for these subjects to clarify the doubts.

9. Academic results :

The end examinations results are analyzed subject wise to know the students performance. If the result of any student is found below average, remedial and tutorial classes are arranged to improve his/her performance.

10. Training Programs :

Campus Recruitment Training (CRT) is offered to the students to get job-ready. Here training is given to improve their hard as well as soft skills. Technical Training is also provided to bridge the gap between academics and Industry.

16. IOT makers space :

For the overall development of the student in terms of technical skills, presentation skills, innovative thinking, developing prototypes, and to get them ready as future entrepreneurs we adopted IOT makers space.IOT Maker Space is an initiative of Telangana Academy for Skill and Knowledge (TASK) and Hyderabad Software Enterprises Association (HYSEA) promoted to all engineering colleges. The institution conducted the following activities.

Event-1: 2-day workshop on Internet of Things (IOT) from 27/03/19 and 28/03/19
Event-2: 2-day workshop on Internet of Things (IOT) from 24/06/19 and 25/06/19.
Event-3: 2-day local Hackathon from 17/06/19 and 18/06/19

17. Institute Industry Interaction Cell (IIIC):

To improve the industry-academia linkage, the institution has established the Institute Industry Interaction Cell (IIIC). Through IIIC, the institute has signed multiple MoU's with industries who are aligned with the core domains of the different programs being offered in the institution. The industries which have signed MoUs have agreed to provide students with internships, opportunities for industrial visits, and visit the institution for placement drives and recruit students. The industries as part of the MoUs have also agreed to conduct training programs for 4th year students prior to graduation.

18. AICTE grants like STTP/MODROBS:

So far the R & D cell has initiated and submitted four Modernisation and Removal of Obsolescence proposals and five Short Term Training programmes to AICTE for grants by various departments.

19. Technological pedagogical and content knowledge (TPCK):

A 6 week faculty developed program has been conducted at KGRCET from 10th August, 2018 by Mr. Rohit Kandakatla, Research scholar, **Purdue University** on Technological pedagogical and content knowledge (TPCK). This program is about to developing instructors to effectively integrate the technology into the content and pedagogy. This program is conducted to 7 faculties from various departments. The schedule of the program is given below:

Week 1 – Reassessing the content for our courses
Week 2 – Taking a deep dive into pedagogy
Week 3 – Introduction to various educational technology tools
Week 4 – Start working on final project
Week 5 – Continue working on final project
Week 6 - Complete final project, presentations

11. Expert lectures :

Expert lectures are organized to simplify the concepts and to support the faculty members. The internal faculty who are experts in particular subjects gives the expert lectures.

12. HR Policies :

A wide range of HR policies have been implemented to improve the retainment of faculty in the institution. KGRCET has established distributed the progress of a faculty into three categories: Assistant Professor, Associate Professor, and Professor. A faculty in each of these three categories is designated into the following hierarchical levels – junior scale, regular, and senior scale. All faculty depending on their years of teaching experience, PhD status, and service provided to the institution as designated to a specific role accordingly. Figure 1 provides a summary of the different roles. Through this new 3-level structure, young and motivated faculty are provided with a clear road map on how to get promoted through the organization ladder.

13. Students Welfare Department :

For the overall development of the students, co-curricular and extra-curricular activities Students Welfare Department works in full swing. Students Council is formed to involve the students in the Teaching-Learning process as well as Sports and Cultural events. Here the focus is on the students to initiate and organize events to enhance their interpersonal and leadership skills.

14. R&D cell :

To promote multidisciplinary research projects with industry collaborations the R & D cell encourages the faculty and students to promote research and publication of papers in international peer reviewed journals preferably with Scopus index, UGC approved journals and peer reviewed journals with ISSN. The total number of papers published in this academic year is 187.

15. MOU'S :

All the respective departments particularly and the institution in general tie up with the industry through the Memorandum of Understanding (MoUs). The students and the faculty members visit the organizations to know and understand the real time working environment. The institution tied up with 26 MoUs in this academic year

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The module delivered in every week is a blended kind of workshop which includes Discussions, Brainstorming, Presentations, Constructive approach, Presentations, etc. Every week various assignments were given in the class on online which also enabled flipped class learning. The brainstorming discussions were happened in the sessions which enabled us to generate more ideas in developing our teaching styles. At the end of every week the participants have submitted the reflection report as a self assessment. The entire faculties have developed the content map which shows the structured layout of the integration of all the three modules. The 6 weeks program includes three parts Content, Pedagogy, Technology and integrating the same to develop a big picture TPACK. For developing the above we have used concept maps to show the pictorial representation of all the three domains. *Cmap* and *mindmup* tools have been used to draw the concept maps. Different versions of the concept maps have been developed to bring out the most effective map at the end. A sample concept map for Electrical Machines course is displayed in the figure. The concept maps developed by the entire faculty have the shared with the rest of them to share and improve the learning if necessary. This will help the instructors to plan the course at the beginning by integrating all the domains and enhances the teaching practices for their respective courses. The curricular priorities like "Enduring Outcomes", "Important to know" and "Good to Know" were addressed in the 6 week program. The difficulty and misconception concepts were addressed with relative pedagogy and technology for respective courses

20. Feedback :

Feedback of the students is collected through Google forms twice in a semester. The feedback is analyzed, action taken reports prepared for all the faculty members, shared and discussed the same with them for their better performance.

21. Pre final exams :

In order to create seriousness among the students, their better performance in the end exams, prepare their syllabus and get habitual of exams, pre-final exams are conducted.

22. Certificate and Value added courses:

To add more substance to the course workshops are organized to make the concepts clear which enable them to get certificates.

Total Number of certificate courses

Civil	EEE	Mech	ECE	CSE	H&S	MBA	Total
1	2	3	2	2	1	1	12

Total Number of value added courses

Civil	EEE	Mech	ECE	CSE	H&S	MBA	Total
2	2	2	2	3	1	2	14

23. Block Chain Technology :

To pave the way for an open and transparent Blockchain powered world the students of the institution are actively involved and created awareness among the peer group.

To motivate the students to be a part of the International Block chain (IBC) HACK 2018 at Hyderabad International Convention Centre (HICC) the following activities are organized.

S No	Date	Event
1	25th June, 2018	Orientation Program
2	10th July, 2018	Boot camp on Block Chain Technology
3	12th July, 2018	College level Hackathon (12 hours)
4	29th-30th June, 2018	Central Hackathon at JNTUH (36 hours)
5	3rd-4th Aug, 2018	IBC HACK 2018 at HICC (36 hours)

24. Lab Maintenance:

Awareness program is conducted on 21/01/19 on lab maintenance for lab Assistants on smooth maintenance in lab area, repairing, refurbishing, calibration services, regular cleaning and outsourcing.

25. Road Safety and traffic rules:

Regular seminars and workshops are conducted by taking help from traffic police men from Moinabad police station to sensitize the students about the road safety rules, and even Road Safety and traffic rules program is conducted for the institute bus drivers on 22/01/19.

26. Canteen Maintenance and food safety:

Food safety refers to the way in which food is prepared, the awareness program is conducted on 23/01/19 to all the staff of the canteen.

27. Importance of Health and Hygiene:

Maintaining health and hygiene is an important aspect in one's life. Taking care of oral hygiene and general cleanliness is emphasized. An awareness program is conducted on 24/01/19 for housekeeping members by women cell in charge

28. Transport Facilities :

The Transport department is working efficiently to provide a meticulous service to the students and staff. As the numbers of students are increasing every year, the numbers of busses are also increased to meet the requirement.

Academic Year	Existing Buses	Buses added	Total Buses	No of Users	
				Students	Faculty Member
2018-19	11	1	12	360	100

29. Telangana Academy for Skill and Knowledge(TASK) Activities :

TASK is an initiative of Telangana Government through which Training & Skill development programs such as Seminars, workshops, Guest lectures and soft skills training are organized to the students. Starting of the every academic year the registration process is opened for all the students, once a student registered in TASK then he/she eligible for attending all the programs conducted in the institution in association with the TASK. Some of the activities conducted in association with TASK are given by.

1. Professor of Practice (POP) Soft skills workshop has conducted through TASK (Topics: for 3rd year students – Organizational skills and For final year students Inter preparation skills)
2. Oracle Database Programming with SQL workshop conducted for 3rd year CSE and ECE students through TASK. (Continuous three days workshop). By this workshop 34 candidates qualified and got the Oracle course completion certificates.
3. MOOC's (Aptitude and reasoning) workshop conducted through TASK for 2nd ECE students. etc.,

30. Placements:

Placement Cell continued its initiatives in career development and campus recruitment activities in the year 2018-19. The Cell has organized different activities to strengthen capacity of young talents and raise their confidence to meet the real life challenges. The Cell has organized several activities to enhance the employability and facilitate employment opportunities for the students.

During the year 2018-19, the Placement Cell has successfully networked with international and national level organizations including Corporate, NGOs, PSUs, government departments and other institutions to arrange job opportunities for students of the KGRCET. During the period under consideration, the Placement Cell facilitated 169 job offers for students from 05 departments of Engineering as against 175 in the previous year i.e. 2017-18. During the period, the Placement Cell and the departments of the KGRCET have facilitated 21 On campus and 02 Off campus recruitment drives, as compared to 28 On campus and 06 Off campus recruitment processes in the previous year. A total 20 campus recruitment processes were organized at departmental level during this period.

The Placement Cell has assisted students to secure employment opportunities in the corporate such as Byjus's, TCS, Deloitte, Sigaramtech, Vasudhaika, Cistron InfoTek Pvt. Ltd, Qspider's, Intellicrats, Genpact, Navata Road Transport, Side Farm Pvt. Ltd, KVR Rail Infra, Sisilies Solutions Pvt. Ltd etc., Apart from this KGRCET has successfully organized Apprenticeship Fair in Association with BOAT and DTE-Telangana and also organized Mega Job Fair 2 in December-2018.

COORDINATOR

CHAIRMAN

COORDINATOR, IQAC
KG Reddy College of Engineering & Technology
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