6.5 - Internal Quality Assurance System

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

- Research Cell established to foster academic research among staff and students
- Introduction of skill/capability enhancement certificate courses
- Enhanced use of ICT by faculty in the teaching-learning process Initiatives for a green campus Solar electricity
- Establishment of Institute Innovation Cell (IIC) from MHRD to encourage innovations among students
- Establishment of AICTE-IDEA Labs to encourage innovations among students.

About Research Cell

As the New Education Policy 2020 envisions, we at KITS have implemented Curriculum Restructuring, Skill Development Programs, Faculty Development programs, Technology Integration, Research and Innovation, Collaborations and Partnerships, Inclusive Education, Community Engagement programs. To promote Research culture among students and faculty members we at KITS have dedicated Research Cell is established along with other Research and Entrepreneurial Eco System with cells like MSME –Idea Incubation centre, AICTE IDEA Lab, State Government – Quality Assurance Cell (EISC-Cell) etc.

The Research Cell at KKR & KSR Institute of Technology and Sciences serves as a dynamic hub to cultivate and enhance academic research among faculty and students. It is structured with nine dedicated Research Scholars and nine experienced Research Supervisors, working in tandem to create a thriving research ecosystem. The primary objectives of the Research Cell include promoting a culture of inquiry and innovation, fostering interdisciplinary collaboration, and enhancing the research capabilities of the institution.

The Research Cell provides a structured platform for scholars to engage in cutting-edge research, addressing both theoretical and practical challenges in various fields. By facilitating access to state-of-the-art laboratories, academic journals, and research funding, the cell empowers scholars to pursue ambitious research projects. Regular workshops, seminars, and conferences are organized to keep researchers abreast of the latest developments in their domains and to provide them with opportunities to present their findings. Additionally, the

Research Supervisors play a crucial role in guiding scholars through the research process, offering expert advice on methodology, data analysis, and publication strategies. This mentorship ensures that research outputs meet high academic standards and have the potential to contribute to the broader scientific community.

Introduction of skill/capability enhancement certificate courses

At KKR & KSR Institute of Technology and Sciences, students are significantly enhancing their skills through specialized certification courses. Through EDUSKILLS, 1618 students have gained practical expertise in high-demand technologies such as Google Developer, AWS, UI Path, Celonis, and ALTERYX, enabling them to become proficient in cloud computing, automation, data analytics, and development. Similarly, 684 students have enhanced their foundational knowledge through NPTEL courses in areas like Principles of Communication, AI, Machine Learning, Deep Learning, and Signal Processing, which are essential for understanding and applying core engineering and advanced technological concepts. These courses provide hands-on experience and certifications that align with industry standards, preparing students for successful careers.

Enhanced use of ICT by faculty in the teaching-learning process Initiatives for a green campus solar electricity

At KKR & KSR Institute of Technology and Sciences, the faculty have embraced Information and Communication Technology (ICT) to enhance the teaching-learning process. This includes the use of digital platforms, online resources, virtual labs, and interactive learning tools to make education more engaging and accessible. These initiatives ensure that students receive a modern, technology-driven education that aligns with current industry practices.

In addition, the institute has undertaken significant initiatives to promote a green campus. One key effort is the installation of solar electricity systems, which reduce the campus's carbon footprint and promote sustainable energy use. These initiatives reflect the institution's commitment to environmental sustainability and the integration of eco-friendly practices into campus operations.

SUMMARY ON
ANNUAL LIGHTING POWER REQUIREMENT & LED BULBS CONSUMPTION KWH

Name of the premises: KKR & KSR Institute of Technology and Sciences

Address: Vinjanampadu, Vatticherukuru – 522017, Guntur Dist. Andhra Pradesh, INDIA.

Location	Attributes	CTL (A)	LED bulbs (B)	LED Flood light (C)	LED Flood light (D)	A+B+C+D	B+C+D
Ground floor (BLOCK -B)	Central Library		77				
	Digital Library		12				
	Canteen	0	40				
	Stores	2					
First floor (BLOCK-B)	Training &Placement Cell		26				
	Seminar Hall		18				
	Open Corridor		24				
	Waiting Hall		6				
	Rest Room		9				
Second floor (BLOCK-B)	Hod & Staff Room (S&H)	1	18				
	Classrooms and Labs		63				
	Rest Room		5				
	Waiting Hall	5	9				
	Open Corridor		38				
Third floor (BLOCK-B)	Class Rooms and Labs (12)		80				
	Rest Room		9				
	Open Corridor		18				
Ground floor (BLOCK -A)	Office & Administration Room	2	18				
	Management Offices	6	22				
	Classrooms and Labs	4	31				
	Server Room	2	18				
	Staff Room	9					
	Open Corridor	25					
	Seminar Hall		18				
First floor (BLOCK-A)	Hod's & Staff Room's	6	18				
	Classrooms and Labs	4	59				
	Rest Room	4					
	Open Corridor	18	14				
	R & D	2					
	Exam Cell	8					
Second floor (BLOCK-A)	Hod's & Staff Room's	5	15				
	Classrooms and Labs	4	104				
	Rest Room		6				

Page 1 of 2

PRINCIPAL
KKR & KSR Institute of Technology & Sciences
Vinjanampadu, GUNTUR-17.

Establishment of Institute Innovation Cell (IIC) from MHRD to encourage innovations among students

To foster the Culture of Innovation, Startup and Entrepreneurship we have huge Innovation and Entrepreneurship Ecosystem at our Institution with different Cells like

- Establishment of AICTE & Ministry of Education, Govt. of India – **IIC (Institution Innovation Council).**

- Establishment of **APSCHE, Govt. of Andhra Pradesh**-EISC (**Entrepreneurial, Innovation and Startup Centre)** - Quality Assurance Cell.

- **AICTE, Govt. of India sponsored AICTE- IDEA Lab**

- **MSME Idea Incubation Centre** Sponsored by MSME, Govt. of India

- Adoption of AICTE, Govt of India –**NISP (National Innovation Start-up Policy)**

- AICTE & MoE's, Govt. of India- KAPILA - Kalam Program for IP Literacy and Awareness

- Ministry of Education & AICTE, Govt. of India – YUKTI Innovation Repository..

- Pre Incubation facilities like CIRD (Centre for Innovation, Research and Development) and Makers' Space.

- **NSIC –** Training Cum Incubation Centre Sponsored by Govt. of India.

The **Institution Innovation Cell (IIC)** along with the other Entrepreneurial Ecosystem cells pave the way for Innovations and Entrepreneurial activities with Industry , Academia interactions to drive the students / Faculty towards success with avenues of funding and investment opportunities. Few of such Remarkable outcomes are:

1. Our Institution is Selected as one of the foremost institutions in the Nation by the Ministry of Education, Ministry of Skill Development & AICTE, Govt. of India by representing Institutional Stall in AICTE, Ministry of Education's **ABBS & NEP-2020 Exhibition -2020 an emblem** of Commitment to the noble goals envisioned by New Education Policy at New Delhi on **29th and 30th July, 2023**, which was inaugurated by our Honorable Prime Minister.

2. Since from the establishment (in 2018) of **Institution Innovation Council** at our institution **has been selecting one of the Top Performing Institutions** in India and has been awarded with Highest Star rating in every Year from 2018 onwards.

3. Our Institution is selected as a Knowledge Partner Institution in National Regional Meet (SCRO Region) Organized by the Ministry of Education & AICTE, Govt. of India on 6th January, 2024.

4. Based up on the continuous performance, our Institution is selected as one of the **"Governing Member Institutions"** in **South-Central Region**

5. Our Institution acquired the Status of "**Band Excellent "in ARIIA -2021 -22 and NIRF Innovation Rank** positioned in **151-300 Band in** Innovation Ranking Category by the **National Innovation Ranking Frame work, Ministry of Education, Govt. of India** for the Year **2023-24.**

Ministry of Education
Government of India

□ Move to Archive ✕

nirf

Certificate

NATIONAL INSTITUTIONAL RANKING FRAMEWORK

INDIA RANKINGS 2023

KKR&KSR INSTITUTE OF TECHNOLOGY & SCIENCES, VINJANAMPADU VILLAGE (CC-JR)

Positioned in the Band of 151-300 in the Innovation Category

CHAIRMAN, AICTE   CHAIRMAN, NBA   MEMBER SECRETARY, NBA

6. Our Institution is selected as **Mentor Institution** under the **Scheme Mentor-Mentee Program 2021-22** with Funding Assistance from MIC (Ministry of Education and AICTE, Govt. of India and mentored 7 (seven) higher Educational Institutions. Consecutively, this year also our institution is selected as **Mentor Institution (2023-24)** to Mentor **5** Higher Educational Institutions under volunteer category by the Ministry of Education & AICTE, Govt. of India.

7. Our Institution is selected as a **Training Partner for National Skill Development Centre**, Govt. of India Under **PMKVY 4.0** (Pradhan Mantri Kaushal Vikas Yogana) Scheme with Funding Assistance of Rs.24 Lakhs.

8. Under our Training Centre **240 Students** are allotted and trained in **3 Skill Courses** - Software **Programmer, Junior Software Engineer, and Software Developer & Product Development**. Among 240 students **182 students successfully completed their assessment and certified** by the Skill India, Govt. of India.

9. Under MSME Incubation Centre so far, 4 following Innovative ideas as funded by the Govt. of India. They are ---

   - An Innovative Idea " **Manufacturing of Bio-Degradable & Recyclable paper bags to Reduce Carbon Footprint by energy efficient Practices** " is Selected for Financial Assistance of Rs.12.75 Lakhs on 16/03/2024.

   - An Innovative Idea **"A Novel IoT and Machine Learning based Automatic waste segregator is selected for a financial assistance of Rs. 12.50 Lakhs.** on 13/07/2023.

   - An Innovative Idea **"Design and Development of Machine learning based fruit plucking drone" with is selected** for financial assistance **of Rs. 12.50 Lakhs on 13/07/2023.**

   - **Chilly cutter and protecting cover during rainy season is Selected for funding assistance of Rs.13 lakhs.**

10. Under Our Entrepreneurial Eco System **102 Student Innovative Ideas are protected with Patents** and 3 faculty Innovative Designs are selected for Patent grants. Among 102 patents published, 40 patents are applied for Reimbursement under KAPILA (Kalam Program for IP Literacy and Awareness), Govt. of India scheme.

11. 3 Innovative Ideas "**Attendance Monitoring System- Made Easy", "Smart–Helmet", & " Smart STALP"** are selected for the Financial Assessment Round of Rs.**10 Lakhs** for

each individually by the **Ministry of Education & AICTE, Govt. of India** in **YUKTI National Innovation Competition 3.0** (Year 2023-24).

12. 5 of our student teams are incorporated their own Start-Ups at our Institution and 4 more Start-ups are under processing to state.

13. Among those startups one Start-up "**KINTSUGI Technologies Private Limited**" is selected for the T-Hub & Algorand Start-Up Labs and raised a fund of Rs.**1.5 Crores** and it is in the due diligence round. The Founders of KINTSUGI Technologies Private Limited attended the Impact Summit organized by Algorand Foundations.

14. A Startup **" AGRI - JAWAN INNOVATIONS PRIVATE LIMITED "** established by a team of students to develop " Robo Farming Devices " is selected for funding assistance of Rs. 25 Lakhs with an Initial amount of Rs. 5 Lakhs from the **Ministry of Agriculture &Farmers Welfare, Govt of India** under **RKVY-RAFTAAR scheme.**

15. This Startup is selected for Agri **Startup Conclave & PM KISSAN SAMMAN SAMMELAN AGRI –STARTUP** Exhibition organized by the **Ministry of Agriculture & Farmers' Welfare, Government of India** and which was inaugurated by the **Hon'ble Prime Minister, Shri Narendra Modiji on October 17th & 18th, 2022 at IARI Mela Ground, Pusa, New Delhi.**

16. **8 of our students & 2** start-ups " Agri- Jawan innovations Pvt. Ltd & KINTSUGI Technologies Pvt. Ltd **are selected for <u>FUTUREPRENEURS - START-UP Yatra Mahakumbh , Bharat Innovates</u>** to exhibit and pitch their Innovative Ideas with Angel Investors and Venture Capitalists, from **18th to 20th March, 2024**, at the **Bharat Mandapam, Pragati Maidan, New Delhi,** organized by DPIIT, Invest India, Startup India and National Startup Advisory Council, **Ministry of Education, Govt. of India** and Industry Stake holders ASSOCHAM, NASSCOM, IVCA, TiE Global, Bootstrap Foundation etc.

17. One of our Students' Innovation Idea **"An Intelligent Toilet System For Rapid Waste Decomposition And Eco-Friendly Waste Management"** secured 4th position and selected for financial Assessment round in National Level IDE(Innovation, Design & Entrepreneurship) Phase –II Boot camp organized by AICTE & Ministry of Education, Govt. of India.

18. **The Start-Up "Virtuverse Technologies Private Limited" received Financial Support of Rs. 2.5** Lakh Rupees for the Prototype Development of their Innovative product on Virual Reality from Harvin Evolutions LLP.

19. **The Start-Up "ASTRIKX Technologies Private Limited" received** Financial Support **of Rs. 2.5** Lakh Rupees for the Prototype Development of their Innovative product on Agricultural Robot developed for Chilly Harvesting from Harvin Evolutions LLP **and 3.5 Lakhs from "Bhramara Town Ship".**

20. A student Innovation " Robotic Device for Farmers" developed by Kavya is selected for Agripreneurship Scheme from Ministry of Farming and Agriculture, Govt. of India and the students completed 2-months Paid Internship from Govt. of India.

21. Another Innovative Idea "An **Integrated Carbon Emission Calculation And Certification System With Blockchain-Based Carbon Credit Trading For Sustainable Environmental Management** developed for Environment Sustainability & to reduce Carbon Foot Print is selected for Financial Assistance **of Rs.30 Lakhs from Bhramara** Town Ship to develop their town ship Carbon Credit Calculation.

22. An Innovative Idea **"Smart Bra to Detect Breast Cancer"** won Best Consolation Prize in an Innovation Fair organized at JNTUK, Kakinada and is also selected for the Financial Assistance from **DIC** (**Design Innovation Centre) & Ministry of Education, Govt.of India.**

23. An Idea **"Reusable Intelligent Sanitary Pad** "developed by a team of Students Won 2nd position in TALScouts - **TRANSFORMERS 2022**- **Global Youth Innovation Challenge** "under **Social Entrepreneurship Category.** This competition was organized around 5 **countries (India | USA| UK | Canada| Bahrain).**The team was awarded with Cash Prize and also offered an opportunity of Internships.

24. 3 Student Batches are selected for **Smart India Hackathon- 2022 grand Finale & 2 Batches for Ideas in Smart India Hackathon- 2023 grand Finale and 1 batch for SIH-2024.**

25. **25-Faculty members** of our Institution are certified as "Brand Innovation Ambassadors" in Basic and Advanced Level of training by the AICTE & MoE, Govt. of India.

26. An idea "Eye **Deep" a** Health Care and Bio Medical Device developed by students to detect various diseases is selected in National Innovation Contest 2.0 for Financial Assessment round of Rs.10 Lakhs.

27. Students' Innovation Idea **"Monitoring of Real Time Crop Health System"** is selected for **AICTE - Chatra ViswaKarma Awards-2019** from SCRO Region, Andhra Pradesh under category **FARM AND FLOCK.**

The following Start-Ups are established at our IIC with Start-Up India Registration IDS.

Name of Venture/Startup	DPIIT/Start up India Registration No.	Year of recognition by DPIIT/startup India
AQUAROBOT SERVICES PRIVATE LIM	DIPP187966	2023-24
VIRTUVERSE TECHNOLOGIES PVT.L	DIPP187684	2023-24
RHIZOME AGRIPRO PVT.LTD	DIPP187912	2023-24
ARCHI FUSION PVT.LTD	DIPP187942	2023-24
ECO SORT SUSSTAINBILITY PVT.LTD	DIPP187960	2023-24
AGRI-JAWAN INNOVATIONS PVT.LTI	DIPP187566	2023-24
FLEX MODIFY SOLUTIONS PVT.LTD	DIPP188220	2023-24
KINTSUGI TECHNOLOGIES PVT.LTD	DIPP187442	2023-24
ASTRIKX TECHNOLOGIES PVT LTD	DIPP188976	2023-24
BRAVIX SOLUTIONS PVT LTD	DIPP188943	2023-24

About Establishment of AICTE-IDEA Labs to encourage innovations among students.

AICTE-Idea Lab is established at KKR & KSR Institute of Technology and Sciences is established on 27th February, 2022 in self-financial mode.

Sanction Letter

All India Council for Technical Education
(A Statutory body under Ministry of Education, Govt. of India)
Nelson Mandela Marg, Vasant Kunj, New Delhi-110070 Website: www.aicte-india.org
AICTE- IDEA Lab Scheme - Sanction Letter

F.No .AICTE/IDEA/IDEA202000060   Date: 08.02.2023

To
The Drawing and Disbursing Officer,
All India Council for Technical
Education, Nelson Mandela Marg,
Vasant Kunj, New Delhi – 110070

Sub: Approval for establishment of AICTE IDEA Lab (Self- Finance) - reg.

Sir/ Madam,
    With reference to the proposal submitted by the institute, this is to convey the approval of the Council for establishment of AICTE-IDEA Lab as per details given below:

1.	Name and address of the Beneficiary Institution:	KKR & KSR INSTITUTE OF TECHNOLOGY AND SCIENCES D NO:646,647 VINJANAMPADU (VILLAGE) VATTICHERUKURU (MANDAL) GUNTUR(DIST) ANDHRAPRADESH PIN:522017
2.	Title of Project:	AICTE-IDEA LAB (provisional)
3.	Name of Chief Mentor:	DR. BABU PENTALA
4.	Duration of the project:	2 years
4.	Total AICTE Contribution	NIL

(i)   This Sanction Letter is being issued in conformity with the terms & conditions as well as norms of the Scheme as already communicated, and also being communicated in this letter.

(ii)   The institution shall have to set up the Lab in 6 months with significant equipment there and show their utilization by conducting activities/ events identified in the Scheme Document in another 6 months. For a year, it will be given provisional status and based on the satisfactory performance (data of which shall have to be mandatorily provided), AICTE will regularize it after assessment, otherwise the provisional status will be withdrawn.

The instructions/ guidelines linked with IDEA Lab Project, to be followed by Institution are as given below:

I.   **Release of funds**
    a)   This scheme is sanctioned under Self- Financed mode as such AICTE will not release any grant in any condition.

II.   **Maintenance of accounts**
    a)   The Institute shall strictly follow the provisions laid down in the Scheme document and this sanction order (No. F.No. AICTE/IDEA202000060 Dated 08.02.2023) issued by this office. All correspondences related to the project must contain this number along with year of sanction of the project; failing which correspondence will not be entertained.
    b)   There will be a separate Bank Account for the project and funds for other Schemes would not be mixed with it.
    c)   The institution shall maintain proper accounts of the expenditure.
    d)   AICTE or its nominee shall have the right to check/ verify the account.

1

The Idea Lab has been utilizing both by the Internal / External Faculty members and students from other educational Institutions and students. Around 3173 Host Institute student members, 500 external members including Alumni has been using AICTE IDEA Lab. Totally 10 Start-ups are incorporated by the Host Institute students and all those are registered in start-Up India portal and Completed DIPP Certification also. 347 projects were developed and among 347 projects 111 projects are protected with patents. Various events were organized as per the instructions received from AICTE and totally Rs.95, 56,869/- (Ninety Five Lakhs Fifty Six Thousand and Eight Sixty Nine Rupees) was incurred towards Incubation/ Idea Lab activities /to purchase equipment. KITS AICTE IDEA Lab totally acquired – 2597 performance points .

Dash Board of AICTE Lab

AICTE IDEA Lab Monitoring Framework

Performance Points

Title	Type	Status
Skill oriented course on Web Designing	Event	submitted
One week Innovation and Entrepreneurship work shop for Robotics using Advanced AI & Deep Learning	Event	submitted
A 2 day workshop on "Entrepreneurship and Innovation as Career Opportunity"	Event	submitted
56219	Patent	
56219	Patent	
56219	Patent	

Parameters	Numbers	Points
Host Institute Faculty Members	137	34
Host Institute Students	3173	317
Host Institute Alumni	276	276
Other Institute Faculty Members	97	48
Other Institute Student	35	7
Industry	5	5
School Teachers	10	10
School Learners	67	13
Entrepreneur/start-up	5	5
Events	76	760
Patent	0	0
Award received	5	300
Projects completed by using AICTE-IDEA Lab	347	347
Handholding an AICTE IDEA Lab in Network	0	0
Investment in AICTE-IDEA Lab	9556869	475
Operational Hours of the AICTE- IDEA Lab (Every day)	0	0
Total Points		**2597**