ISO 9001:2015 AICTE-CII: GOLD Category Institute NAAC-'A' Grade Institute (CGPA: 3.21)

KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬౦౧౫, తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in E-mail: principal@kitsw.ac.in : +91 9392055211, +91 7382564888

ACADEMIC & ADMINISTRATIVE AUDIT REPORTS

of

Academic Year 2023-24

Academic Audit Conducted

on

28th & 29th March, 2025

CONTENTS

No. 22/IQAC/KITSW/2025 Date: 17/03/2025

IQAC CIRCULAR

Sub: Academic & Administrative Audit and committee visit on 28th & 29th March 2025- Reg.,

I am happy to inform that the Principal has accorded the permission to Internal Quality Assurance Cell (IQAC) to conduct academic & administrative audit of various departments as per the guidelines of NAAC and UGC. The **Academic & Administrative Audit Committee(AAA)** consists of external members and internal members to inspect all the departments of the institute. As per the instructions of the Principal the following academic & administrative audit committee constituted to visit various departments on ***28th & 29th March 2025 (Friday & Saturday).***

1. **Prof. C. Venkatesh** — Chairperson
   Coordinator, IQAC, KITSW
2. **Prof. M. Sadanandam** — External Member
   Dean, FoET, KU, Warangal
3. **Prof. A. Venugopal** — External member
   Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal
4. **Prof. M. Komal Reddy** — Member
   Registrar, KITSW
5. **Prof. K. Venumadhav** — Member
   Dean, Academic Affairs, KITSW
6. **Prof. M. Veera Reddy** — Member
   Dean, R&D, KITSW

The schedule of the departments/cells visit as follows:

S.No	Date	Time	Department
1	28-03-2025 (Friday)	9.00am: Arrival of External Members (Cordial interaction with Principal)	
2		9.15am to 10.15 am	Dept. of CE
3		10.15am to 11.15am	Dept. of ECI
4		11.15 am to 12.15pm	Dept. of EEE
5		12.15pm to 1.15pm	Dept. of ME
6		2.00 pm to 3.00pm	Dept. of CSE
7		3.00 pm to 4.00pm	Dept. of IT
8		4.00 pm to 5.00pm	Estb. & Academic sections
9	29-03-2025 (Saturday)	9.15am to 10.15 am	Dept. of ECE
10		10.15am to 11.15am	Dept. of CSN
11		11.15 am to 12.15pm	Dept. of PSS & MH
12		12.15pm to 1.15pm	Dept. of MBA
13		2.00 pm to 2.30pm	Exam branch
14		2.30 pm to 3.00pm	R&D Cell
15		3.00 pm to 3.30pm	IQAC
16		3.30pm to 4.00pm	Exit Meeting

In this regard, I request all the Heads of the departments kindly keep the academic & administrative audit files ready as per the format given by IQAC and cooperate to the committee during the visit. Further, the filled and signed copy of the application (hardcopy) should reach IQAC by **21.03.2025 (Friday)** and soft copy by email to iqac@kitsw.ac.in.

Thank you for your kind support and concern.

C. Venkatesh

Prof. C. Venkatesh
Coordinator, IQAC

To: Above Committee members, HoDs
Copy to: Principal

Overall Remarks By

EXTERNAL EXPERT

Prof. A. Venugopal, Professor(HAG),
Dept. of Mechanical Engineering, NIT, Warangal

KITS Warangal – Academic and Administrative Audit Report

Overall Best Practices

1. **Robust Academic Governance**:
   - Regular Course Committee Meetings (CCM) and Class Representative Committee (CRC) meetings.
   - Effective Outcome-Based Education (OBE) implementation in most departments.
2. **Faculty Development**:
   - Significant faculty participation in FDPs, and NPTEL certifications across several departments.
   - Structured mentorship and high faculty retention.
3. **Industry Linkages and Internships**:
   - A good number of functional MoUs for student internships, consultancy, and research.
   - Industry-led webinars, guest lectures, and collaborative research initiatives.
4. **Student-Centric Activities**:
   - High student satisfaction in teaching-learning (especially in IT and MBA).
   - Encouragement for student participation in hackathons, competitions, and clubs (e.g., SAE, i2RE).
5. **Quality Assurance Mechanisms**:
   - Regular feedback collection from stakeholders (students, alumni, employers) with action-taken reports.
   - NBA accreditation achieved for many UG/PG programs.

Institutional Strengths

1. **Qualified and Experienced Faculty**:
   - Multiple departments with >50% Ph.D.-qualified faculty e.g., MBA, ECE, Physical Sciences).
   - Strong faculty-student ratios (FSR) across departments.
2. **Laboratory Infrastructure**:
   - Well-equipped labs in Mechanical, Electrical, Civil, and Computer Science departments.
   - Upgraded ICT tools (e.g., CourseWeb portals, e-learning platforms).
3. **High Pass Percentages**:
   - Departments like CSE, EEE, and Physical Sciences report pass percentages >90%.
4. **Student Enrollment and Progression**:
   - Full enrollment in key programs (e.g., CSE, IT, MBA).
   - Strong placement performance in CSE and CSN (over 60%).

Key Institutional Weaknesses

1. **Low Research Funding and Utilization**:
   - Most departments report either zero seed money utilization or no sanctioned projects.
   - Few departments have submitted research proposals; even fewer received grants.
2. **Faculty Cadre and Ph.D. Supervision**:
   - Departments like IT and CSN have weak cadre ratios and low Ph.D. faculty percentages.
   - Limited number of recognized Ph.D. supervisors.
3. **Placements in Core Sectors**:
   - Mechanical, Electrical, ECIE and IT departments show lower placement rates in core industries.
   - Over-reliance on software jobs and lack of targeted placement efforts.
4. **Alumni and Industry Engagement**:
   - Minimal alumni financial contributions or structured engagement initiatives.
   - Limited collaboration with national/international institutions.
5. **Administrative and Infrastructure Gaps**:
   - Lack of budget allocation for conference travel or FDPs.

Final Recommendations for Improvement

1. Research Enhancement

- Allocate and mandate seed funding usage.
- Organize faculty development workshops focused on grant writing.
- Target ≥ 15 publications and ≥ 2 externally funded projects per department per year.
- Encourage interdepartmental and interinstitutional collaborations (IITs, NITs).

2. Curriculum Modernization

- Conduct regular BoS meetings.
- Introduce $\geq 5\%$ new courses annually in emerging areas (AI, IoT, sustainability).
- Embed skill certifications (e.g., AutoCAD, CFD, Google Cloud) into curricula.

3. Faculty Development and Cadre Improvement

- Achieve $\geq 70\%$ Ph.D. faculty across departments by 2025.
- Link industrial training and Ph.D. completions to performance appraisals.
- Provide financial aid for conferences, certifications, and doctoral research.

4. Industry and Alumni Engagement

- Institutionalize alumni endowment funds and mentorship programs.
- Establish Centers of Excellence with industry (e.g., renewable energy, smart systems).
- Expand and utilize MoUs for internships, placements, and consultancy.
-

5. Student Development

- Increase placement training, particularly in core engineering sectors.
- Provide coaching for GATE, GRE, and civil services.
- Promote research participation and student-authored publications.

6. Administrative Reforms

- Implement a centralized digital dashboard to track:
  - Research progress
  - Placement statistics

- Curriculum revisions
- Student feedback

Conclusion

KITSW demonstrates a strong foundation in teaching, infrastructure, and faculty quality, with commendable practices in academic governance and student engagement. To transition from a good to a leading institution, focused efforts in **research intensification, curriculum modernization, and strategic industry collaboration** are essential. Implementing the above recommendations will not only improve NAAC/NBA scores but also elevate the institute's national reputation and student outcomes.

29/3/2025

Prof. A. Venugopal, Professor(HAG),
Dept. of Mechanical Engineering, NIT, Warangal

Overall Remarks By

EXTERNAL EXPERT

Prof.M. Sadanandam,
Dean, FOET, KU, Warangal

- Institution posses a Well qualified and experienced faculty, staff and supportive management with established systems and mechanisms for maintenance and up keeping.
- The college adheres to the academic calendar for the conduct of Internal Examinations with a well-structured examination system.
- Institutions is following the Outcome Based Education (OBE), ABC (Academic Bank of Credits), encouraging MOOCs participation among the students.
- Programme and Course Outcomes are stated to ensure the awareness of Student Learning Outcomes of the programmes and courses.
- I suggest the institution to follow the TPS Collaborative Learning Strategy (Think, Pair, and share), which helps in promoting Participation, focuses attention and engages students.
- Also, try to focus on increasing employability and integrating market-oriented skills with education.

"We appreciate the tremendous effort and dedication you have all put into preparing for this assessment." "During our visit, we were particularly impressed by the vibrant student life, the commitment to research, the well-maintained facilities. "We also noted the institution's commendable achievements in academic performance, research output, community outreach I would like to suggest that you consider focusing on enhancing research infrastructure, improving student support We believe that by focusing on these areas, the institution can further enhance its quality and achieve even greater success." I am confident that this institution has the potential to become premier and leader in higher education in India. I wish you all the best in your continued effect to achieve excellence. Finally I would like to express my sincere gratitude the entire institute for your warm hospitality and collaborative spirit we experienced during the visit

The following things to be strengthened:

CIVIL: consultation work, placements and alumni activities and encourage phd submissions.

Mech: student performance must be improved and Alumni also

ECI: placements and publications

Cse: research publications It : poor placements and publications

Csn: MOUS

Ece: Research projects

Prof.M. Sadanandam,
Dean, FOET, KU, Warangal

ACADEMIC & ADMINISTRATIVE AUDIT PHOTOS

Department of CE

Department of ME

Department of ECIE

Department of EEE

Department of CSE

Department of CSE(Networks)

Department of IT

Department of ECE

Department of M&H

Department of PS

Department of MANAGEMENT

IQAC CELL

AICTE IDEA LAB

R&D CELL

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. Department of Civil Engineering Publishes two newsletters per year. 2. Department of Civil Engineering Publishes one technical magazine per year among which AAKRUTHI a student technical magazine is exclusively published by the students of civil engineering. 3. Faculty of Civil Engineering encourages students to attend conferences and publish technical papers. 4. Department of civil engineering monitors each and every final year student in Major project hours and helps in completing the project in time 5. Department of Civil Engineering organizes Parents meet with the parents of students who have Backlogs and shortage of Attendance and helps them get through. 6. Every week there will be a guest lecture from prominent people in the society during Civil Engineering Association Hour (Every Monday- 12:05pm to 1:05pm) 7. Faculty of Civil Engineering impart awareness and social responsibility to students (explaining about social mingling, environmental hazards, pollution control like no use of Plastics in day-to-day life) as a part of regular Academic schedule. 8. Mission Go Green Initiative- Sewage Treatment plant and Roof Top Solar Power plant is Designed and Executed by the Faculty of Civil Engineering. (Dr.L. Sudheer Reddy Dean P&E, Professor.) 9. The infrastructure in the campus is planned, designed and executed by Civil Engineering Faculty. 10. Most of the Students publish their research work with faculty in peer reviewed Journals. The Faculty and Students of Civil Engineering are trained to implement energy conservation principles.	• Publishes news letters twice a year and technical magazine yearly once • Guest lectures by the experts from academia and industry are organized. • Parents meet is being organized with the parents and students performed poor academically.

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: · Industrial Consultancy Cell- Civil Engineering is a jewel in the college providing services to public and private sector and generating revenue to the college. · Mission Go Green initiation and implementation from the department · Ethical and dedicated faculty, most of the faculty in the department are Alumni of the college and are from industry background.	• Laboratories are well equipped as per curriculum. • Computing facilities are sufficient. • High Faculty retention and experience.

· Spacious laboratories with modern equipments. · Culture of encouraging faculty to go beyond the syllabus, and students to work things out independently; · Culture of encouraging our best students to stay within academics and research. · Culture of encouraging research in students by giving Best Student Project awards. · Frequent Industry interaction with students, Field visits, and application-oriented teaching using Engineering works executed in the campus. · Diversity in teaching – providing guest lecturers from prominent people like NITs, IITs and construction industry etc. · Conducting National level technical symposia and conferences every year to encourage research and skills among students and faculty. Blended Teaching using OBLS and strictly following OBE.	
Weakness: · Only 12 People out of 23 have Ph.D. · Contribution of project outcomes to conferences is few. · Progress of PhD students is slow. UG admissions have been slowed down due to more demand of software Engineers.	• No faculty research proposals submitted or sanctioned. • Zero seed money utilization. • Placements is low despite internships.
Opportunities: · Changing syllabus to make it more flexible and make students industry ready. · Improving computational facilities by establishing real time labs. · Encouraging students to implement innovative ideas. · Encouraging research by faculty members. Using online resources to supplement traditional teaching methods.	• Introduce new courses in sustainable engineering, smart infrastructure, etc. • Secure at least 2 funded projects and establish a center of excellence. • Mobilize alumni networks, organize competitive exam workshops.
Challenges: · Effectively teaching a heterogeneous group of students. · Keeping students focused in the face of increasing competition in every sphere. · Providing useful career advice to students. · Ensuring that all students graduate with the competence and maturity expected of an educated person in society. · Motivating students for placements in our domain for field oriented jobs and other domain for companies offering low package. · Motivating students for Higher studies in premier institutions like IIT's and NIT's and other research organisations. Ensuring that all students graduate with the competence and maturity expected of an educated person in society.	

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: To strengthen interdisciplinary skills.	Action Plan: • Industry visits • Imparting core & software skills	
Short term goal 2: To improve teaching learning process of the faculty by conducting /participating in AICTE/UGC/self sponsored seminars in the department.	Action Plan: · By conducting One FDP's/ Seminar per year. Introducing Course web and OBLS	
Short term goal 3: Stage wise Modernization of labs.	Action Plan: To modernize Soil Mechanics, CT lab by replacing old equipment.	

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): · To create centre of excellence for Research and development in Civil Engineering. · Making students industry ready by introducing full time internship in construction industry during 8th semester. Action Plan: · The Department has already started to modernize and expand laboratories. Proposing MoU's with construction industries for internship.	

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
Distinctiveness of the Department: Ø Faculty experience and retention Ø Industrial Experience Ø Generating significant revenue through industrial consultancy. Ø Faculty with foreign degrees/IITs and NITs-(60%)	

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
May be provided details such as specifications and make of major equipment, list of experiments, list of common equipment/tools, date of purchased, maintenance, calibrations etc	Details of new equipment procured in 2022-23 is provided in Annexure 1.	New equipment is procured
Purpose and justification not clear	Purpose and justifications are provided in Annexure 1.	
Summary of stakeholders resolutions may be included	Mentioned in Annexure 2 stakeholders survey file.	
Workload is not uniform; it should be standardised as per AICTE/UGC norms	Complied through attached circular from O/o Principal Annexure 3.	
Summary or conclusions of assignment evaluations to be included for better interpretation	Evaluation rubrics were included in course file.	• Students are well informed about the evaluation rubrics.
Action taken is incomplete	CCM, CRC and CRM conducted regularly and is complied.	• Action taken report shall be compiled.
Summary, conclusions and suggestions of student performance should be included for better understanding to parents	Institute dynamic website development is under process which includes details of student's performance to parents.	
Object of remedial classes and reaching the objective not clear	The objective of R.C. is to improve the performance of identified slow/weak learners based on CIE.	
No correlation with resolutions, actions, realizations and ATR is incomplete	CCM, CRC, and CRM conducted regularly and is complied	• Complied
Make up classes' objectives must be differentiated from remedial classes and completed accordingly	Makeup classes are conducted for students who were absent on various grounds for regular theory/ lab courses. Remedial classes were conducted for identified slow/ weak learners based on CIE.	• Complied
Encourage for latest ICT tools and customised department specific exclusive ICT tools or software's may be procured	All the faculty are using ICT tools for Blended/ Hybrid TLP (Teaching learning process).	

Conference papers may be excluded from course research papers	Course research papers are floated through only refereed journals	
Faculty wise publication number should be included and 32 faculty published 15 Scopus journal papers- Needs improvement	Faculty-refereed publications were improved from 15 to 21.	
Proposed projects 17, submitted-0, approved-0, Serious efforts are required for preparing better proposals as per respective funding agency thrust areas, send project proposals to outside experts for review and suggestions before submission, think out of box to improve.	The project proposals were submitted to MSME. Further faculty are encouraged to submit the proposals to funding agencies.	
Eligible-134, Registered-40, Placed-40: Reasons for less than 50% students' registration, core placements details to be included	Students' placements in 2022-23 improved from 30% to 50%. Eligible -131 Registered-96 Placed & higher education - 65	• Efforts are to be made to improve placements
· Associate Professors shortage as per AICTE cadre ratio · Faculty pursing PhD - 13-Details of registration date, reasons for not completing, research progress since then, type of research, etc are to be included for proper audit · Rewrite best practices, swoc, short- and long-term goals to reflect your dept achievements, future targets and should be more realistic (Restrict for one page only)	· Intake for Civil Engineering is reduced from 120 to 60 from the AY-2022-23, Hence the faculty cadre ratio is maintained as per the intake. · Details are included in Annexure 4. (PhD) · Enclosed in Part D (swoc, short and long term goals)	

(*Name & signature of the Department Academic Coordinator with Date*)

(*Name & signature of the Head of Department with Date*)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Organize research proposal writing workshops, align projects with agency thrust areas, and mentor faculty.
2	Provide financial support for faculty to attend conferences/workshops
3	Faculty are to be encouraged to utilize Seed grant given by the institute to carry out research activities leading to publications and projects.
4	Try to have more collaborations with Industry and R&D labs for getting sponsored projects.
5	Strengthen industry partnerships, career counseling, and GRE/GATE coaching
6	Aim for **≥50% placement** through MoUs with construction firms and skill certifications (e.g., AutoCAD, STAAD.Pro)
7	Incentivize Ph.D. completion, reduce teaching loads for research-active faculty

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C. Venkatesh *Coordinator, IQAC, KITSW*	Chairperson	28/3/24
2	Prof. M. Sadanandam *Dean, FOET, KU, Warangal*	External Member	
3	Prof. A. Venugopal *Professor (HAG), Dept. of Mechanical Engineering, NIT, Warangal*	External Member	
4	Prof. M. Komal Reddy *Registrar, KITSW*	Member	
5	Prof. K. Venumadhav *Dean, Academic Affairs, KITSW*	Member	
6	Prof. M. Veera Reddy *Dean, R&D, KITSW*	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. **Outcome-based education approach:** The department follows an outcome-based education approach, developing outcome-based learning strategies (OBLS) with clear objectives and outcomes and allows for continuous improvement. 2. **i²RE implementation in teaching learning process:** The department promotes innovation and entrepreneurship through course research papers, course patents, course projects, mini & major projects etc. in teaching learning process and entrepreneurship activities. 3. **Regular student-led webinars:** The department holds weekly webinars on latest trends in Mechanical Engineering and to develop self-disciplined and entrepreneurial mindset 4. **Training and placement opportunities:** The department provides regular training in communication skills and aptitude to increase students' employability. The department also conducts company specific trainings. 5. **Encouraging internships and external competitions:** The department encourages students to pursue internships during vacations to acquire necessary problem-solving skills. Additionally, students are encouraged to participate in external competitions both academic and extracurricular. 6. **Regular parent meetings and communication:** The department conducts regular parent meetings to provide feedback on the progress and development of their children. The department sends progress reports to parents via registered post and also shares soft copies of exam results via WhatsApp. Counsellors also reach out to parents to enquire about a student's absence from exams. 7. **Student counselling:** The department assigns one counsellor to each student to provide personalized attention and support. Through regular counselling sessions during MYC period, students can discuss their academic performance, personal issues, and career goals with their counsellor. 8. **Active Society for Automotive Engineers (SAE) India KITS Collegiate Club:** The SAE India KITS Collegiate Club was established in 2008 to expose students to various technical aspects of the automobile industry. Under the guidance of the club, students design all-terrain vehicles and participate in SAE BAJA competitions. The SAE India KITS Collegiate Club has won eight prizes at the national level over the past decade.	• Faculty cadre ratio (4:3:28) aligns with NBA standards • Research center recognized under Kakatiya University • Collaboration with other departments for interdisciplinary lab usage • Structured Course Committee Meetings (CCM) and Class Representative Committee (CRC) meetings • Participation in SAE BAJA competitions and industry-led webinars

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: 1. **Well qualified and experienced faculty** with doctoral degrees and good faculty retention ratio. 2. **Specializations available** in various fields of mechanical engineering, enabling students to develop expertise in specific areas. 3. Regular **research publications** in reputable peer-reviewed journals, such as SCI/SCOPUS/WoS. 4. The department is equipped with **12 state-of-the-art laboratories**, including a central workshop and a separate CAD lab with necessary software and experimentation facilities. 5. The department was recognized as a **Research Centre by Kakatiya University, Warangal.** 6. **Strong, accomplished, and well-settled alumni** in various domains in India and abroad. 7. **Supportive administration.** 8. The department is involved in a **collaborative project** with the University of Pittsburgh Medical Centre (UPMC) to design, manufacture, and market a Total Artificial Heart (TAH) as part of the IAAH Project, which is a Centre of Excellence.	• High number of faculty with Ph.D. (17 out of 35) and degrees from reputed institutions (IITs/NITs) • Well-equipped labs (10 UG, 4 PG) with significant investment (□2.36 crores total equipment cost) • 10 functional MoUs with industries/institutions for internships and research
Weakness: 1. Less R&D projects 2. Lack of Industrial consultancy work	• Efforts are required to improve Research and consultancy
Opportunities: 1. Leveraging emerging technologies like AI, IoT, and automation in the curriculum. 2. Strengthening of advanced research facilities. 3. To secure funding for research projects. 4. Strengthening ties with industries for research collaborations and job opportunities. 5. Academic agreements/International partnerships with universities abroad for enhancing students' admission. 6. Human resource development for teaching and research.	• Align with industry trends • Target outreach programs and scholarships to enhance enrollment.
Challenges: 1. Attracting best quality students. 2. Attracting High CTC paying core companies. 3. Declining interest in core branches among parents and students. 4. Competing with premier institutes in research and technical education.	• Efforts are required to attract best quality of students and core companies for placements

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 2: Modernization of Mechanical Research Laboratory	Action Plan: Procurement of New systems with latest configuration	
Short term goal 1: Strengthening of MCAD Laboratory with new design softwares	Action Plan: 1. Budget proposals shall be presented for the procurement of software's like COMSOL / CATIA / Fusion 360.	• Encouraged to establish Software lab.

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): 1. To emerge as a center of excellence in the field of Mechanical Engineering 2. To provide consultancy services to the Industry on latest technologies. 3. To empower students to pursue higher levels of graduation, leadership positions & entrepreneurial endeavors. **Action Plan:** 1. Coordinate effectively with other disciplines to engage and work on technological breakthrough with multidisciplinary research 2. Collaboration with industry 3. Academic agreements/International partnerships with universities and industries for enhancing required skills	• Establish interdisciplinary activities to encourage multidisciplinary approach. • Establish academic /industrial MOUs for enhancing research activities

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
Distinctiveness of the Department: • The department is existing since the inception of the institute • The department has highest number of doctorates (17) • The department recognized as the research center by Kakatiya University, Warangal. • Average experience of faculty is above 15 years. • The department is accredited 6 times by NBA Tier-I (UG) • PG program of the department is also accredited by NBA Tier-I • The department holds weekly webinars on latest trends in Mechanical Engineering to develop self-disciplined and entrepreneurial mind-set. • The department recognized as local chapter by ISHRAE. • Students participate actively in SAE Collegiate club every year.	

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
Sponsored research and consultancy is limited to a few departments. The faculty members have to be motivated towards applying for sponsored research projects by giving some financial benefits such as Matching Grants and Professional Development Fund	• Identified the major research areas according to design, thermal & production streams. • Every year Ph. D. holders are submitting the proposals to various funding agencies and the copies of the same are forwarded to Principal office & Dean, R&D. • MRG are identified based on research areas and will prepare the project proposals according to it and submit to funding agencies such as SERB, DST etc. as per yearly calls. • It is resolved to prepare product-based proposals.	Complied
Research output by a way of publications in SCI / Scopus indexed journals needs a substantial improvement. Institute may give awards for those faculty with good publications to promote the culture of publishing	FRIS scheme should be reinitiated to encourage the faculty to publish the papers in SCI/SCOPUS indexed journals. The faculty are publishing journal papers based on UG/PG projects and the same is in place.	• Publications have been improved but needs further efforts to enhance quality publications
Institute may introduce one or two PhD scholarships for each department to encourage research and publications. Intra-disciplinary research shall be encouraged	The faculty without Ph. D are encouraged to register for PhD. PhD scholarships should be offered based on C.V. and good credentials	
Motivate the faculty without PhD to pursue the PhD as a priority	The faculty without Ph. D are encouraged to register for PhD. PhD scholarships should be offered based on C.V. and good credentials.	• PhD scholarships should be offered based on the competency of the research topics and scope for quality publications.
A strong alumnus base needs to be established so that they may be invited to the Institute on a regular basis to promote interactions among the students on campus with the alumni. Alumni support may be tapped to institute Merit/Endowment awards	The procedure is in place. Industry expert alumni will be involved as external examiner for major project evaluation.	
Placements are majorly in software for most of the branches of engineering. Efforts are required to invite core companies for campus placement Efforts shall be made by the concerned departments also in order to improve core placements	• Core companies list will be prepared. • More number of MoUs with core industries are planned. • Automobile industry list will be prepared to assist placements to SAE students in particular.	

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
Industry-Institute interaction may be given a priority	• Industry expert will be involved as external examiner for major project evaluation. • Industry expert is to be included in Major Project evaluation committee to improve the project quality. • Mini & major project models / poster presentations will be exhibited to the juniors. • Product based projects will be encouraged and convert the same work into appropriate credits. • Industry expert interactions with students will be planned before MSE-I and after MSE-I	Complied
CO, PO and PSO attainments are low. This may be because of fixing same targets for all the courses. This may be revised	• Identify the courses with large gaps between attainment and target values. • It is planned to reduce the PO target levels in URR-24 for existed URR-18 large gaps	Complied
Innovation, Incubation and Start-up culture among the students need to be developed. Efforts may be put in right from the first year	• I&I culture is in place. • Design thinking lab will be introduced in next scheme URR-240. • The students are participating in events organized by i²RE	
Funding students to promote innovation - Student participation in Innovation, Incubation and Entrepreneurship activities through I2RE	NA	
Conducting Guest lectures, Industrial visits and Industrial training have to be enhanced	• Industry expert interactions with students will be planned before MSE-I and after MSE-I • Institute has to give the extraordinary leave to faculty for industrial training and provide TA/DA for industrial training. • Examination duties relaxation is to be given to faculty going for industrial training.	

28/3/25

(*Name & signature of the Department Academic Coordinator with Date*)

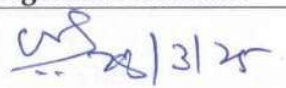
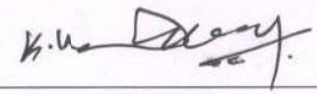
28/3/25

(*Name & signature of the Head of Department with Date*)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Publications in quality journals are to be improved
2	Need to focus on externally funded R&D projects.
3	Need to enhance academic / industrial MOUs to enhance research activities
4	A group of faculty may join together and shall utilize the seed grant to carry out research activities leading to publications.
5	Effort shall be focused on improving the core placements and also the pay packages for students in campus placements
6	Alumni support may be tapped to nurture young student minds

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C. Venkatesh *Coordinator, IQAC, KITSW*	Chairperson	
2	Prof. M. Sadanandam *Dean, FOET, KU, Warangal*	External Member	
3	Prof. A. Venugopal *Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal*	External Member	
4	Prof. M. Komal Reddy *Registrar, KITSW*	Member	
5	Prof. K. Venumadhav *Dean, Academic Affairs, KITSW*	Member	
6	Prof. M. Veera Reddy *Dean, R&D, KITSW*	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
▪ Intensive student counseling system ▪ CourseWeb facility to inculcate I²RE culture among students ▪ Students are encouraged to complete certification courses offered by NPTEL/Udemy/Linked In/ CoEs-KITSW/any other professional organization ▪ Regular industrial visits are arranged ▪ Students are encouraged to take up Major/ Mini projects related to social concern ▪ Frequent alumni interactions and expert lectures are arranged ▪ College Management System (CMS) to monitor student attendance and performance ▪ Anti-plagarism policy to inculcate ethics among students to write quality reports ▪ *Department News Letter and Magazine are published biannually* ▪ Additional measures to improve the performance of weak learners and to support advanced learners	▪ Students are encouraged for additional learning in terms of industrial visits, NPTEL courses

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: • **Committed & Experienced Faculty with Research Orientation** • **Dedicated Technical & Supporting Staff** • **Well Equipped Laboratories** • **CoE - NI LabVIEW Academy** • **Strong Alumni support**	• 100% faculty participation in FDPs, with certifications like NPTEL Domain Certification • Regular interactive sessions and expert lectures • Average teaching experience of 19.78 years, with 50% holding Ph.D.s and 7 faculty pursuing doctoral degrees
• **Research Centre**	
Weakness: • **Students with poor academic background and with lack of communication skills**	• No sanctioned projects (3 submitted but none approved) • Mentor faculty in writing competitive grant proposals
Opportunities: • **Students have opportunities in core sector related to *Embedded systems, VLSI, Signal processing, Industrial automation etc.,***	• Revise curriculum to include emerging tech (e.g., IoT, AI in ECIE)
Challenges: • **Placements & Higher Education are two major challenges faced by department**	• Strengthen industry partnerships for core placements. • Offer GATE coaching and research-oriented training • Reduce teaching loads for research-active faculty

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: • To **collaborate with premier educational institutes** like IITs, NITs and **industries** for **Academia/ Industry Internships**	Action Plan: • Research scholars and other faculty who are working in the area of Biomedical signal processing, VLSI and Instrumentation are advised to identify and establish contact with renowned educational institutes and specialized hospitals , core Industries to organize FDPs, Workshops and Industry Internships	• Collaborate with IITs/NITs for joint research projects
Short term goal 2: • To **increase number** of **core placements**	Action Plan: • Encourage companies to offer internships as part of their hiring strategy, which could translate into full-time core placements after graduation. • Organize workshops and training sessions that are directly relevant to the skills required in core industries. • Focus on soft skills, technical skills, and industry-specific knowledge. • Regularly conduct mock interviews, resume-building workshops, and offer feedback from industry professionals. Establish departmental placement teams that can work closely with students to understand their strengths and job preferences, ensuring they are matched with the right placements.	• One or two scholarships for PhD every year in every department may be introduced by the Institute based on the topic and possibility of quality publications.

Long Term Goal(s) of the Department		Committee Remarks
Long term goal(s): ▪ To **strengthen research activity** in the areas of faculty expertise	Action Plan: • Enhance Research Infrastructure and Resources • Encourage Faculty Development and Continuous Learning • Increase Student Involvement in Research • Collaborate with Industry and Government Agencies	• Zero seed money utilization despite institutional support
▪ To **collaborate with IITs, NITs & industries** and **aim at <u>funded research</u>** and **<u>consultancy</u>**	Action Plan: • Host workshops and seminars where industry professionals can share their technological challenges, and faculty can present potential research solutions. These platforms can also help match industries with academic researchers with the right expertise.	

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
Distinctiveness of the Department: • **Human Resources:** Team of experienced and committed faculty who strives hard for the sustained growth of the department by providing outcome based education to the students. **Average experience in teaching is 21 yrs.** • **Infrastructure:** Well-furnished Laboratories with state of the art equipment in line with Industry 4.0 technologies. • **Goals:** Facilitating environment for the students to identify and pursue their professional goals on par with ECE students. • **Placements:** On and Off campus placements in reputed Software, Core and Public Sector companies like TCS, Infosys, Tech-Mahindra, Musigma, Accenture, Google, Reliance Power, L&T, BOSCH, Caterpillar Electronics, IBM, BARC, IOCL, ISRO, DRDO, SAIL, NTPC, KTPS, JKP, etc. • **Opportunities:** Opportunities in Industries related to IoT, Artificial Intelligence, VLSI, Embedded Systems, Wireless communications, Power, Petrochemicals, Pharmaceuticals, Chemical and Food processing, Plastic-Rubber moulding, Optical and Laser based communications, etc.	

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Sl. No.	Suggestions/ Recommendations	Action taken / Proposed action
1.	Online Course web portal is in place where all the lecture material, tutorials, PPTs and Assignments, etc are made available to the students.	• All lecture materials, CDTs, SLTs, Course Patents, Course Research Papers, Previous question papers were uploaded to the Course Web portal and made available in downloadable formats (PDF, DOCX, and interactive quizzes).

2.	Publications in quality journals are to be improved.	• Faculty members are now more actively engaged in research activities for publishing in SCI, Scopus journals. • Major Research Groups are formed and were encouraged to focus on interdisciplinary and innovative research areas with potential for publication in high-impact journals.
3.	More efforts are required to improve Research and Consultancy	• A framework for the MoU was developed, outlining the general terms, areas of collaboration, roles and responsibilities, and timelines for both parties. Key aspects of the MoU included: 1. Research Collaboration: Joint projects and funding opportunities for collaborative research. 2. Student Engagement: Internship and placement opportunities for students. 3. Consultancy: Opportunities for faculty to engage in industry-specific consultancy. 4. Skill Development: Training programs and workshops for both students and industry personnel.
4.	CO, PO attainments are observed to be very poor in many courses. The targets may be fixed based on the past performance of the students in that course and POs.	• Minor modifications in the syllabus is done every year to reflect the latest trends in education, industry requirements, and research advancements. • The modifications include updating CO-PO targets, upgrading syllabus content, and aligning the course objectives with current academic and industry needs. • Additional online resources were introduced to help students understand difficult topics and improve performance. • A counselling system was set up to provide personalized guidance to students who were struggling with certain course outcomes, with faculty members offering make-up classes for slow learners.
5.	A group of faculty may join together and shall utilize the seed grant to carry out research activities leading to publications.	• Faculty members were grouped into Major Research Groups (MRGs) based on common research themes, with a focus on interdisciplinary areas • Faculty groups were guided through the process of preparing detailed research proposals, which included clear objectives, methodologies, expected outcomes, and the potential for publication.

6.	Try to have more collaborations with Industry and R&D labs for getting sponsored projects.	• A framework for the MoU was developed, outlining the general terms, areas of collaboration, roles and responsibilities, and timelines for both parties. • Industry Collaboration: Strengthen industry collaborations to gather more detailed and up-to-date feedback on syllabus relevance and ensure that courses are aligned with the ever-evolving job market. • Faculty interacted with industry expert during syllabus revision • Industry experts are invited as an adjunct faculty for the industry related courses.

Dr. K. Srinivas

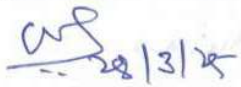
(*Name & signature of the Department Academic Coordinator with Date*)

(*Name & signature of the Head of Department with Date*)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Target ≥15 publications/year and secure ≥2 funded projects by 2025
2	Introduce ≥5% new courses annually (e.g., embedded systems, 5G technologies)
3	Achieve ≥60% core placements via MoUs with companies like Bosch, DRDO
4	Implement a dynamic dashboard for real-time tracking of student performance and faculty research

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	**Prof. C. Venkatesh** Coordinator, IQAC,KITSW	Chairperson	
2	**Prof. M. Sadanandam** Dean, FoET, KU, Warangal	External Member	
3	**Prof. A. Venugopal** Professor (HAG) Department of Mechanical Engineering	External Member	
4	**Prof. M. Komal Reddy** Registrar, KITSW	Member	
5	**Prof. K. Venumadhav** Dean, Academic Affairs, KITSW	Member	
6	**Prof. M. Veera Reddy** Dean, R & D, KITSW	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. Regular Student Counselling process. 2. Remedial Teaching for slow learners. 3. Pre-assessment of students by conducting Placement Examinations and mock interviews. 4. Regular conduction of Class Review Committee meetings. 5. Frequent Alumni Interaction programme. 6. Providing Internship opportunities to students. 7. Conduction of Association activities to inculcate academic and management skills. 8. Providing interaction between students and faculty using College Management System. 9. Encouraging students to develop innovative projects to facilitate campus automation. 10. Attainment of Program specific course outcomes. 11. Motivating students to nurture ideas and realize dreams by inculcating innovation, incubation, research and entrepreneurship culture in the campus.	

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: • **Strengths:** B. Tech(CSE) Program is accredited by NBA and regularly renewing the status. • The Department of Computer Science & Engineering has been recognized as research centre by the Kakatiya University, Warangal. • Excellent and adequate infrastructure facility. • Imparting quality education with the help of dedicated faculty members. • At about 80% students either being recruited in campus placements or taking higher education. • Regular conduction of Remedial/Makeup classes for slow learners. • Continuous evaluation system to be vigilant of student progression. • Periodical review of curriculum by considering all stakeholder inputs • Department has 16 faculty holding Ph.D from reputed organizations. • Using modern ICT tools for teaching learning process. • All corners of the department are WIFI enable	• 100% enrolment in UG programs • High pass percentage for final-year students • Technical fests, coding competitions and association activities helping the students to achieve good number of placements

• Internet connectivity with 1Gbps capacity • Student projects to digitize institute activities • Continuous effort to improve soft skills of student community • Strong alumni support • Emphasis on academic social responsibility through student clubs • Good industry connect provided to student with CSE association activates	
Weakness: • Diversity of students • Lack of Ph.D Guideship of the faculty members with Ph.D • Lack of collaborations with R&D organizations • Inter disciplinary research activities • Remote location disadvantage for frequent industry interaction	• Number of Publications is very low. • Very less efforts in writing proposals for getting research projects. • No seed money utilization by the faculty
Opportunities: • The currently high demand for qualified computer science and ICT professionals. • High qualification and efficiency of faculty to admit teaching and consultancy • Anxiety of students to learn • Conducting research actives for publications in peer reviewed journals • Active co curricular and extracurricular activates for outreach Programmers • Active alumni association for gathering awareness of outside world • Autonomy to brining dynamic changes in curriculum that adapts to new technology	
Challenges: • Bridging the gap between industry and academia • Training students to cater ever changing technologies. • Gathering co-operation from all stake holders. • Carrying out research and extension activates in field of computer science and engineering • Motivating students for exploring opportunities in entrepreneurships • Deploying more efforts of faculty for getting research projects and consultancy services • Encouraging students for innovative projects and globally approved working models • Inspiring faculty and students to file patents and publishing high qualify journals • Associating with government initiatives on Smart cities, Atal-incubation, Digital India, Swachabarath, skill development program etc.,	• Enter MoUs with Industry / academia for increasing research output. • Prepare students to improve core placements and high paid jobs

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: Improvement in campus placements and earn high packages	Action Plan: Providing rigorous training to students	• Provide training in coding to crack high competitive jobs
Short term goal 2: Improving quality of Teaching learning	Action Plan: Providing industry training to faculty	• Have MoUs with industry to provide internships
Short term goal 3: Improving quality in research activities	Action Plan: Applying for research funding	• Improve efforts in submitting research proposals

Long Term Goal(s) of the Department	Committee Remarks
Long term goal: To become Centre of excellence in the field of computer science Action Plan: 1. Assessment and Benchmarking: Evaluate current status and compare with top institutions. 2. Faculty Development: Recruit skilled faculty, offer professional development. 3. Curriculum Enhancement: Update courses, add interdisciplinary options. 4. Infrastructure Development: Invest in labs, computing facilities, and software. 5. Research and Innovation: Encourage research, collaboration, and entrepreneurship. 6. Student Engagement: Provide support, organize events, and offer scholarships. 7. Industry Collaboration: Partner with companies, startups, and research institutions. 8. Quality Assurance: Maintain high standards and pursue accreditation. 9. Global Outreach: Promote achievements, engage in international collaboration. 10. Continuous Evaluation: Assess effectiveness, adapt strategies based on feedback.	

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
Distinctiveness of the Department: **Outcome based Education**: Outcome based education ensures students to acquire desired knowledge andskills in the area of computer science and Engineering. **Innovation, Incubation, Research and Entrepreneurship (i2RE):** Inclucating i2RE practice in teaching learning process aims to empower students their creativity, knowledge, and ideas into impactful projects and products to excel in placements and higher education.	

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
Sponsored research and consultancy is limited to a few departments. The faculty members have to be motivated towards applying for sponsored research projects by giving some financial benefits such as Matching Grants and Professional Development Fund	• Identified the major research areas in AI, ML, Data Science and Network Security • Every year Ph. D. holders are submitting the proposals to various funding agencies and the copies of the same are forwarded to Principal office & Dean, R&D. • MRG are identified based on research areas and will prepare the project proposals according to it and submit to funding agencies such as SERB, DST etc. as per yearly calls. • It is resolved to prepare product-based proposals.	• Publications are observed to be poor in spite of having 10 research scholars working in the department. • Efforts are very minimal in applying for external research funding. • The faculty pursuing PhD shall be encouraged by giving relaxation in the workload.
Research output by a way of publications in SCI / Scopus indexed journals needs a substantial improvement. Institute may give awards for those faculty with good publications to promote the culture of publishing	FRIS scheme should be reinitiated to encourage the faculty to publish the papers in SCI/SCOPUS indexed journals. The faculty are publishing journal papers based on UG/PG projects and the same is in place.	
Institute may introduce one or two PhD scholarships for each department to encourage research and publications. Intra-disciplinary research shall be encouraged	The faculty without Ph. D are encouraged to register for PhD. PhD scholarships should be offered based on C.V. and good credentials	
Motivate the faculty without PhD to pursue the PhD as a priority	The faculty without Ph. D are encouraged to register for PhD. PhD scholarships should be offered based on C.V. and good credentials.	
A strong alumnus base needs to be established so that they may be invited to the Institute on a regular basis to promote interactions among the students on campus with the alumni. Alumni support may be tapped to institute Merit/Endowment awards	The procedure is in place. Industry expert alumni will be involved as external examiner for major project evaluation.	
Efforts shall be made by the concerned departments also in order to improve core placements	• More number of MoUs with software industries are planned.	
Industry-Institute interaction may be given a priority	• Industry expert will be involved as external examiner for major project evaluation. • Industry expert is to be included in Major Project evaluation committee to improve the project quality. • Mini & major project models / poster presentations will	

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
	be exhibited to the juniors. • Product based projects will be encouraged and convert the same work into appropriate credits. • Industry expert interactions with students will be planned before MSE-I and after MSE-I	• Faculty shall be encouraged to go industrial training in the advanced topics. • Encourage students to work on product based projects having entrepreneurial potential.
CO, PO and PSO attainments are low. This may be because of fixing same targets for all the courses. This may be revised	• Identify the courses with large gaps between attainment and target values. • It is planned to reduce the PO target levels in URR-24 for existed URR-18 large gaps	
Innovation, Incubation and Start-up culture among the students need to be developed. Efforts may be put in right from the first year	• I&I culture is in place. • Design thinking lab will be introduced in next scheme URR-240. • The students are participating in events organized by i²RE	
Funding students to promote innovation - Student participation in Innovation, Incubation and Entrepreneurship activities through I2RE	NA	
Conducting Guest lectures, Industrial visits and Industrial training have to be enhanced	• Industry expert interactions with students will be planned before MSE-I and after MSE-I • Institute has to give the extraordinary leave to faculty for industrial training and provide TA/DA for industrial training. • Examination duties relaxation is to be given to faculty going for industrial training.	

Dr. B. Raghuram, 28-03-2025

(Name & signature of the Department Academic Coordinator with Date)

Dr. P. Nirandan, 28/3/25

(Name & signature of the Head of Department with Date)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Faculty shall utilize seed money to work for future external funding
2	Expand MoUs for joint projects and internships
3	Encourage Ph.D. completions and guide-ship recognition
4	Enhance soft skills and global certification programs (e.g., AWS, Google Cloud)
5	Promote collaborations with R&D labs
6	Launch alumni endowment funds for scholarships/lab upgrades
7	Department shall take initiatives for improving placements and securing high packages.

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C. Venkatesh *Coordinator, IQAC, KITSW*	Chairperson	28/3/25
2	Prof. M. Sadanandam *Dean, FOET, KU, Warangal*	External Member	
3	Prof. A. Venugopal *Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal*	External Member	
4	Prof. M. Komal Reddy *Registrar, KITSW*	Member	
5	Prof. K. Venumadhav *Dean, Academic Affairs, KITSW*	Member	
6	Prof. M. Veera Reddy *Dean, R&D, KITSW*	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. Adhering to the academic calendar 2. Industrial visits (once in a semester) 3. Industrial training in summer (KTPS, Palvoncha) for selected 30 students every year 4. Regular workshops conduction for students 5. Guest lectures from industry experts and alumni 6. Regular counseling of students having backlogs and less than 75% of attendance 7. Regular student feedback and corrective actions taken	**Industrial visits are organized.** **Counselling system is good.** **Alumni coordination is existing in terms of guest lectures.**

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: 1. Student -Faculty ratio of 13 (exceeding NBA requirement) 2. 14 faculty having Ph.D.s and 9 faculty pursuing Ph.D. 3. 1 faculty pursuing Post doctorate fellowship 4. Research Laboratory 5. State of Art Power Systems Laboratory, Renewable Energy Systems Laboratory 6. Student-Computer ratio of 3.9 7. 4 Licensed software's 8. Good number of publications 9. Strong alumni base	**A good SFR and well established labs** **Strong Alumni base**

Weakness: 1. Less number of student publications 2. Less alumni funding 3. Less number of research grants	**Sincere efforts to be made for research paper publishing and project grants. Establish labs with industry collaboration**
Opportunities: **1.** Possibility of collaboration with international and National reputed academic institutions **2.** Tapping of Alumni for funding and setting up of research facilities and research grant	**Alumni strength is to utilized properly for internships and placements.**
Challenges: **1.** Attracting the students from other states and countries **2.** Providing opportunities in core sector for the students (despite doing the internships, students are getting placed in software companies due to high average salary packages in them) **3.** Getting research grants from funding agencies	

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: Receive research grants from government research organizations and other funding agencies	Action Plan: **(i).** Training the faculty in writing effective research proposals **(ii).** Identifying relevant funding agency for submission of proposals	
Short term goal 2: Establishing an industry/ alumni sponsored labs in the area of renewable energy sources or plug-in hybrid vehicles	Action Plan: **(i).** Identifying the industry requirements from a graduate of EEE **(ii).** Identifying the required equipment to be set up	

	in research facility/ lab **(iii).** Identifying alumni/industry for sponsoring the required equipment	

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): 1. Encouraging students to become entrepreneurs in the field of renewable energy or electric vehicles 2. Industry Institute Connect program for training of industry persons at the department in the field of power electronics and renewable energy Action Plan: 1. Setting of research center and allowing the faculty to work in emerging areas of power electronic drives for deriving solutions for problems associated with renewable energy and electric vehicles 2. Working in collaboration with people from industry/ premier institutes for acquiring research grants:	

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
Distinctiveness of the Department: 1. Research Laboratory and EV club 2. Advanced softwares like MATLAB, PSIM, MiPOWER & PSCAD 3. 14 number of faculty with Ph.D.s 4. 01 faculty pursuing Post Doctor Fellowship 5. MoUs with TS Genco , NITW & MATLAB	

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Academic Audit Remarks	Action Taken Report
Efforts may be put in towards getting a research center recognized by KU	• Department has applied for research Centre under Kakatiya University with supporting documents. • Five of our faculty members have been recognized as research supervisors from AY2024-25
Research and publications are very poor	• Faculty are encouraged to publish in high -impact journals through incentives (FRIS and FRSS) • Major Research Groups have been formed in the department to foster collaborative research • Grant writing workshops shall be conducted for faculty members • Funding opportunities from government agencies have been identified and circulated among the faculty.
Try to have collaborations with IITs, NITs, Industry and R&D labs leading to publications and projects	• Institute has MoU with NIT, Warangal • Faculty are encouraged to develop collaborative proposals with faculty from NIT, Warangal and nearby industries
Get CORE companies for placements	• A list of core companies has been identified and the same has been forwarded to the Training and Placement Cell of our institute. • Besides, our faculty have been contacting leading core companies and inviting them for campus placements. • Medha Servo Drives and JK Paper Mills have agreed to visit our department for core placements in the current academic year. • 5 students got internship and placements

28/3/2025

[Dr. B. Jagadish Kumar]

(*Name & signature of the Department Academic Coordinator with Date*)

Dr .G.Rajendar

(*Name & signature of the Head of Department with Date*)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Establish industry partnership for funded projects and collaborative labs
2	Plan for increasing the core placements and higher CTC
3	Encourage young faculty to pursue PhD

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C. Venkatesh *Coordinator, IQAC, KITSW*	Chairperson	28/3/25
2	Prof. M. Sadanandam *Dean, FOET, KU, Warangal*	External Member	
3	Prof. A. Venugopal *Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal*	External Member	
4	Prof. M. Komal Reddy *Registrar, KITSW*	Member	
5	Prof. K. Venumadhav *Dean, Academic Affairs, KITSW*	Member	
6	Prof. M. Veera Reddy *Dean, R&D, KITSW*	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM &LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. Active involvement of Stakeholders in department academic activities. 2. Skill and Employability Enhancement for Students by conducting program skill development laboratory	

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: • Dedicated faculty with strong qualifications and retention, supported by well-equipped infrastructure and labs. • Continuous monitoring and counselling of students for the overall improvement of the student. • Placement Training, Personality Development programme, professional development activities and value-added programmes are conducted for students' career development.	• Strong Faculty Profile with a mix of experienced professors • High pass percentage and good overall grades •
Weakness: • Student publications have to be improved. • Number of PhD holders has to be improved in the department • No Research laboratory exist in the department • No research grants from reputed organizations. • R&D and consultancy need to be enhanced.	• Limited research grants, few publications in UGC-CARE journals, and no dedicated research lab. • Low placements. • No financial support from Alumni

Opportunities: • Seminars and Project works can be converted into publications. • Faculty are submitting the proposal to the research organizations for funding • Department can try to generate funds from consultancy work and provide hands-on experience to the students.	• Faculty shall target external funding for projects • Expand I2RE (Innovation, Incubation, Research, Entrepreneurship) initiatives for startups • Strengthen ties with industries/R&D labs for internships, training, and joint research
Challenges: • Updating of curriculum according to the industrial expectations. • To sign MoUs with companies and R&D to have collaborative domain & specific training programs	• Improve placements and motivate students for higher studies

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: To improve students' placements	Action Plan: a) During association hour, we are planning to conduct motivation sessions with already placed students in different companies. b) b. To invite eminent speakers from industries for delivering guest lectures on latest technologies.	
Short term goal 2: To motivate students to establish startups and be successful entrepreneurs	Action Plan: 1. Integrating Innovation Incubation Research and Entrepreneurship (I2 RE) into course teaching by giving special assignments on Course Patents and Course Research Paper	

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): • To complete Ph.D. Programme. • To publish research papers and claiming patents. • To acquire research grants	

Action Plan: 1. Motivating faculty to apply for research grants every year. 2. Regular monitoring of research progress of individual faculty. 3. Planning to organize research talks by experts to improve effective research capabilities	

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
Distinctiveness of the Department: **Strong Leadership and Talent**: The department might be characterized by strong leadership and well qualified, experienced and dedicated faculty who are committed to excellence and continuous improvement. **Specialized Focus:** The IT Department have a specialized focus on a particular area of information technology, focus: such as cyber security, data analytics and artificial intelligence and department organizes guest lecturers to students periodically **Cutting-edge Technologies:** The department could prioritize the adoption and implementation of cutting-edge technologies, staying ahead of industry trends and ensuring that department remains competitive in its technological capabilities and department organizes FDPs to the faculty on cutting-edge technologies.	

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
Certificate programs as well as technology training shall be focused to improve the career development opportunities for the students	Students are doing NPTEL certification programmes and actively participated in internship programmes	
Students may be encouraged to work towards innovation, Incubation and Entrepreneurship through I2RE activities	The IT students are participating in the technical activities and workshops organized by I2RE	
Alumni Interaction shall be increase to create awareness with the state-of –the-art technologies and job opportunities and also to motivate the students towards Entrepreneurship	Alumni are visiting the department and interacted with the students about job opportunities and Entrepreneurship	
Efforts may be made to drives students toward higher studies by providing coaching in national level exams such as GATE.	During the association hours of the department, Higher education awareness programmes are conducted.	
Students shall be encouraged to participate in national/International level technical/Cultural Events	-	

Faculty have to put in more efforts to write proposals for getting externally funded sponsored projects and high quality publications	Faculty members submitted their proposals in DST SERB Faculty published their publications mostly in Scopus and SCI journals	
Faculty have to utilize the seed grant provided by the institute and work towards publications/projects	-	
Teacher shall be motivated to pursue Ph.D	2 Faculty members joined in NIT Warangal to pursue their Full time Ph.D and 1part time Ph.D. 3 Faculty members joined in Kakatiya University to pursue Part time Ph.D 1 Faculty member joined in SR University to pursue Part time Ph.D	
Efforts shall be made to improve CO,PO and PSO attainments	Efforts are made to improve CO,PO and PSO attainments like • Remedial classes were conducted to improve fundamentals of engineering mathematics, science and engineering fundamentals for weak students • Students are converting their mini / major project into research papers and publishing in reputed conferences and journals. • Students are doing NPTEL courses to improve their knowledge in the subject.	

Dr. Y. Bhavani

(Name & signature of the Department Academic Coordinator with Date)

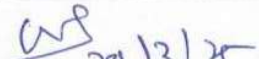
Dr. T. Senthil Murugan 28/3/25

(Name & signature of the Head of Department with Date)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Focus on research grants, MoUs, and curriculum updates to align with emerging technologies
2	Provide incentives for publications and PhD completions
3	Encourage participation in national/international events and research projects
4	Boost placements via industry partnerships and alumni mentorship

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	**Prof. C. Venkatesh, Coordinator, IQAC, KITSW**	**Chairperson**	
2	**Prof. M. Sadanandam, Dean, FoET, KU, Warangal**	**External Member**	
3	**Prof. A. Venugopal, Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal**	**External member**	
4	**Prof. M. Komal Reddy, Registrar, KITSW**	**Member**	
5	**Prof. K. Venumadhav , Dean, Academic Affairs, KITSW**	**Member**	
6	**Prof. M. Veera Reddy , Dean, R&D, KITSW**	**Member**	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Shot Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1) The department publishes two newsletters annually. 2) One technical magazine is published by the department each year. 3) Faculty members in the department provide ongoing counseling to students to enhance their academic performance. 4) The department organizes guest lecturers featuring industry experts and alumni annually to inspire students. 5) In every laboratory, students utilize a laboratory manual cum record book prepared by the department's lab handling faculty. 6) The department hosts workshops, seminars, and other technical events for students with the backing of professional bodies such as IEEE, WIE, ISTE, and IETE, led by the Head of the Department of ECE. 7) It is compulsory for students to undergo internships, deliver seminar presentations, undertake hardware mini-projects, and execute major projects, subsequently publishing them in peer-reviewed publications. 8) Students are provided access to state-of-the-art equipment and software through the AICTE-sponsored IDEA lab, fostering innovation and incubation. 9) Partial or complete financial aid is provided for student innovative projects. 10) Faculty members are encouraged to publish their research work in UGC Care listed journals through institute policies like the Faculty Research Incentive Scheme (FRIS) and the Faculty Research Support Scheme (FRSS).	

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths : 1. Continuous progressive evaluation system for students 2. Regularly curriculum is updated with inputs from the stakeholders 3. Strong industry and alumni collaboration with visible, measurable outcomes. 4. Large number of initiatives undertaken for supporting number of slow learners and students from diverse backgrounds. 5. Use of Innovative teaching methods like use of course web for posting course videos, lecture summaries and self-learning topics by faculty which is useful for the students to view the same at any time throughout the semseter 6. The department has strong placement record. In last three years, most of the eligible candidates were placed in various MNCs with good CTC 7. Good research paper/journal/book publications by faculty and students 8. Students undertake MOOCs, NPTEL Courses and earn credits leading to Minor certifications in other specializations and awarding of Honorary degree 9. Internet facilities are also available in all the departments and Wi-Fi facility is available to all the students in the campus 10. Language Lab in the Department of English to develop the communicative ability of the students and faculty members.	1. Comprehensive Evaluation Systems – Regular Course Committee Meetings (CCMs), feedback mechanisms, and PO/PSO attainment assessments. 2. Experienced Faculty – 33 faculty members, including 17 with Ph.D. qualifications. 3. Strong Research Activity – 34 UGC-CARE journal papers published. 4. Good Placement Record – Over 55% of students placed or in higher education; strong core industry interaction. 5. Accreditation – NBA accredited for 3 years. 6. MOOCs & Skill Development – High student participation in NPTEL/SWAYAM and minor certifications. 7. Infrastructure – Well-equipped labs, IDEA Lab, Wi-Fi access, and a 3:1 student-computer ratio.

11. Many extra-curricular activities and co-curricular activities are conducted through the nine clubs under Student Activity Centre (SAC). 12. Experienced and qualified faculty members with expertise in various fields. 13. Well-equipped laboratories and facilities for practical learning and experimentation. 14. Strong industry connections leading to opportunities for internships, guest lectures, and collaborations. 15. Robust curriculum aligned with industry standards and emerging technologies. 16. Active participation in research and development activities, contributing to advancements in the field. 17. Supportive administrative staff facilitating smooth operations and student services. 18. Accreditation by NBA and NAAC ensuring quality education and recognition. 19. Access to funding and grants for research projects and academic initiatives.	
Weaknesses : 1. Lack of flexibility in admitting International students to degree programs 2. Limited resources and funding for infrastructure development and maintenance. 3. Inadequate training or professional development opportunities for faculty and staff. 4. Inconsistent engagement with industry partners or alumni for collaborative initiatives.	1. No major funded government research projects. 2. Low PG Admissions 3. Limited interactive alumni sessions and under-utilized industry linkages. 4. Low PhD Guide Recognition – Only 3 recognized research guides among 33 faculty members.

Opportunities: 1. With the growing trend in ICT based learning innovative methods may be incorporated into the teaching learning methodology. 2. Job oriented and skill development courses can be introduced for self employment and in- house training for students in latest domains and upcoming technologies 3. Can go for a new post graduate program and blended specialized courses 4. To have an International campus. 5. Expansion of interdisciplinary programs or collaborations with other departments. 6. Integration of emerging technologies such as artificial intelligence, IOT, Machine learning and renewable energy into the ECE curriculum. 7. Partnerships with local industries or startups for research projects, internships, and job placements. 8. Enhanced online learning initiatives to reach a wider audience and facilitate lifelong learning. 9. International collaborations for exchange programs, joint research, or student recruitment. 10. Customized training programs or certifications to address specific industry skill gaps.	1. Emerging Tech Integration – AI, IoT, ML, and Renewable Energy courses can be added. 2. Internationalization – Potential to attract international students and foster global tie-ups. 3. New PG Programs – Scope for launching interdisciplinary and specialized PG programs. 4. Industrial Collaboration – Scope for MoUs, sponsored projects, and COEs with core companies. 5. Government Schemes – Can align with Make in India, Smart Cities, and Digital India initiatives.
Challenges: 1. To provide job opportunities to the PG students. 2. Attract good rankers and bright students to join in UG and PG courses 3. Enhancing number of students opting for entrepreneurship and higher education. 4. With growing interdisciplinary approach in teaching-learning process, there is a greater challenge to periodically restructure our research infrastructure and industry partnership.	1. Enhancing PG Employability – Placement for PG students remains low. 2. Attracting High-Ranking Students – Need more aggressive outreach and branding.

5. Government initiatives launched recently on smart city, start-ups, make in India, clean India, skill development schemes have close parallel to the vision and mission of the institution which needs to be integrated. 6. More autonomy in admission procedure to attract international students. 7. More research grants and industry partnerships are needed for student product development activities in order to groom potential entrepreneurs. 8. Regulatory changes or accreditation requirements impacting curriculum or operations. 9. Rapid advancements in technology necessitating frequent updates to infrastructure and curriculum. 10. Balancing academic rigor with student mental health and well-being initiatives. 11. Addressing environmental sustainability concerns in engineering practices and education.	3. Frequent Tech Advancements – Requires regular curriculum and infrastructure upgrades. 4. Limited Autonomy in Admissions – Restrictions on attracting international students. 5. Balancing Mental Well-being – Need mechanisms to ensure academic and emotional balance

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: To make the students industry ready	***Action Plan:*** By providing in house training to the students and updating them with latest technology by taking them on industrial tours and enrolling them for internships in leading technological companies	
Short term goal 2: To produce Ph.D regularly	***Action Plan:*** By producing adequate research facilities in the department	
Short term goal 3: Academic excellence	***Action Plan:*** By producing best academic resources to the students with reference to premier institutes in the country	

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): 1) To see that all the faculty in the department are with doctorial degrees 2) Initiate more industrial tie ups for consultancy projects. 3) Industry institute interaction towards establishing centre of excellence ***Action Plan:*** 1) To encourage faculty to purse Ph.D and complete the requirements to be awarded with Ph.D. 2) To sign MOU's with Industries relevant to Electronics & Communication Engineering. 3) To have tie-ups with leading industrial firms for establishing centre of excellence in the campus by respective firms in turn leading to further job opportunities for students in their subsidiaries	

IV. Portray department distinctness

Distinctiveness of the Department	Committee Remarks
Introduction: The Electronics and Communication Engineering (ECE) department at KITSW stands at the forefront of innovation and academic excellence, propelled by a commitment to addressing the evolving needs of society while upholding traditional values. In this discourse, we delve into one area distinctive to its priority and thrust, showcasing the department's outstanding performance within the realm of research and development (R&D). **Setting the Stage:** At the heart of the ECE department's mission lies a dedication to fostering technological advancement and ethical leadership among its students. Since its inception, the department has strived to instill a culture of	

innovation, research, and academic rigor, ensuring graduates are equipped with the skills and knowledge needed to tackle real-world challenges. **Embracing Innovation:** The cornerstone of the department's success in R&D is its unwavering commitment to embracing innovation. Through strategic partnerships with industry leaders and research institutions, the department has created a vibrant ecosystem conducive to groundbreaking discoveries and technological breakthroughs. Faculty members, renowned for their expertise in diverse areas of electronics and communication, spearhead cutting-edge research initiatives that push the boundaries of knowledge and practice. **Nurturing Talent:** Central to the department's success is its emphasis on nurturing talent and fostering a culture of curiosity and inquiry. From the moment students step foot into the department, they are encouraged to explore their interests, engage in hands-on research projects, and push the boundaries of what is possible. Under the mentorship of esteemed faculty members, students have the opportunity to delve into areas such as embedded systems, wireless communication, signal processing, and more, paving the way for future innovation and discovery. **Encouraging Collaboration:** Collaboration lies at the heart of the department's R&D endeavours, with interdisciplinary teams coming together to tackle complex challenges from multiple perspectives. Through collaborative research projects, industry internships, and knowledge exchange programs, students and faculty alike benefit from exposure to diverse ideas and approaches, enriching their academic experience and fostering a spirit of innovation and collaboration.	

Driving Impact:

The ultimate measure of the department's success in R&D lies in its ability to drive meaningful impact, both within the academic community and beyond. From developing cutting-edge technologies to addressing pressing societal issues, the department's research endeavours are guided by a commitment to making a positive difference in the world. Whether it's designing smart healthcare solutions, optimizing communication networks, or enhancing cyber security protocols, the ECE department at KITSW is dedicated to leveraging technology for the betterment of society.

Celebrating Achievements:

Over the years, the ECE department has amassed an impressive array of accolades and achievements, underscoring its position as a leader in the field of electronics and communication engineering. From prestigious research grants and patents to publications in top-tier journals and conferences, the department's contributions to the advancement of knowledge and technology are widely recognized and celebrated.

Looking Ahead:

As the pace of technological innovation continues to accelerate, the ECE department at KITSW remains committed to pushing the boundaries of what is possible and preparing the next generation of leaders and innovators. With a steadfast focus on excellence, collaboration, and impact, the department is poised to shape the future of electronics and communication engineering and make a lasting imprint on the world.

Conclusion:

In conclusion, the performance of the Electronics and Communication Engineering department at KITSW in the realm of research and development is nothing short of exemplary. Through a relentless pursuit of innovation, a commitment to nurturing talent, and a dedication to driving meaningful impact, the

department has cemented its reputation as a beacon of excellence in the field. As we look towards the future, we are excited to see what new discoveries and breakthroughs the department will bring forth, continuing to push the boundaries of knowledge and technology for the betterment of society.

Future Plans of action for next academic year (500 words)

Introduction:

As we embark on the journey towards the next academic year, the Electronics and Communication Engineering (ECE) department at KITSW is poised to build upon its legacy of excellence and innovation. With a keen eye towards the future, we have outlined a comprehensive roadmap that encompasses strategic initiatives aimed at furthering our mission of academic excellence, research advancement, and societal impact.

1. **Enhancing Curriculum:**

One of our primary objectives for the upcoming academic year is to enhance the curriculum to better align with emerging trends and industry demands. By introducing new courses and updating existing ones, we aim to ensure that our students are equipped with the latest knowledge and skills needed to thrive in a rapidly evolving technological landscape. Additionally, we will explore opportunities for interdisciplinary collaboration, enabling students to gain a holistic understanding of electronics and communication engineering.

2. **Strengthening Research Initiatives:**

Research lies at the heart of our department's ethos, and we are committed to bolstering our research initiatives in the coming year. Through increased collaboration with industry partners and research institutions, we will facilitate the development of cutting-edge technologies and solutions that address pressing societal challenges. We will also focus on securing additional funding opportunities to support

faculty and student-led research projects, fostering a culture of innovation and discovery.

3. **Expanding Industry Partnerships:**

In line with our commitment to fostering strong Industry-Institute Interaction, we will seek to expand our network of industry partnerships in the upcoming year. By forging strategic collaborations with leading companies in the electronics and communication sector, we aim to provide students with valuable industry exposure and internship opportunities. Additionally, we will explore avenues for joint research projects and technology transfer initiatives, creating mutually beneficial partnerships that drive innovation and economic growth.

4. **Enhancing Student Engagement:**

Student engagement and success are paramount to our department's mission, and we are dedicated to enhancing the overall student experience in the next academic year. Through a variety of initiatives such as mentorship programs, student clubs, and professional development workshops, we will empower students to reach their full potential both academically and professionally. Additionally, we will continue to support extracurricular activities and competitions that foster creativity, teamwork, and leadership skills among students.

5. **Promoting Diversity and Inclusion:**

Diversity and inclusion are core values that underpin our department's culture, and we are committed to promoting a welcoming and inclusive environment for all members of our community. In the coming year, we will implement initiatives aimed at increasing diversity among students and faculty, fostering a culture of respect and understanding, and providing support services for underrepresented groups. By embracing diversity, we aim to enrich the learning experience and cultivate a vibrant and inclusive academic community.

Conclusion: As we look towards the future, the Electronics and Communication Engineering department at KITSW is poised to embark on an exciting journey of growth and innovation. Through strategic initiatives focused on curriculum enhancement, research advancement, industry collaboration, student engagement, and diversity promotion, we are confident that we will continue to uphold our commitment to excellence and make a meaningful impact in the field of electronics and communication engineering. With a shared vision and collective determination, we are ready to chart the course ahead and shape the future of our department for generations to come.	

V. Previous Academic Audit remarks and Action Taken Report

<table>
<tr><th>Previous Academic Audit remarks</th><th>Action Taken Report</th><th>Committee Remarks</th></tr>
<tr><td>1) Online course web portal is in place where all the lecture material, tutorials, PPTs and Assignments, etc. are made available to the students. Question bank may also be made available for each course.</td><td>Provision is made in the online course web portal for the uploading of "previous semesters - additional exam papers & solutions", where question bank may also be made available.
(Proof: Course web link)</td><td></td></tr>
<tr><td>2) Publications in quality journals are to be improved.</td><td>As part of Performance Based Appraisal System (PBAS) for annual increment, Academic, Research, Consultancy and Industrial training (ARCIT) compliance parameter is introduced which insists the publications in quality journals.
(Proof: ARCIT Policy document)
<table>
<tr><th>A.Y</th><th>SCI</th><th>Scopus</th><th>UGC</th><th>Conferences</th><th>Books and Book chapters</th><th>Patents</th></tr>
<tr><td>2023-24</td><td>13</td><td>19</td><td>0</td><td>24</td><td>11</td><td>03</td></tr>
<tr><td>2022-23</td><td>08</td><td>10</td><td>05</td><td>30</td><td>09</td><td>03</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>3) More efforts are required to improve Research and Consultancy.</td><td>All the faculties are encouraged to conduct their respective research work in the direction that the work may be utilized as consultancy work.

<table><tr><th>A.Y</th><th>No of Consultancy Projects</th><th colspan="2">Details:</th></tr><tr><td>2023-24</td><td>02</td><td>1</td><td>Title: Automated Conveyor Belt Sorting System,

Company: Multi tech Systems, Hyd,

Duration: 2 Years (11th August 2023 to 10th August 2025)

Amount: Rs. 5,00,000.00</td></tr><tr><td></td><td></td><td>2</td><td>Title: Mobile-Based Agriculture Motor Controller

Company: Elegant Embedded Solutions Pvt. Ltd., Hyderabad

Duration: 2 Years

(11th September 2023 to 10th September 2025)

Amount: Rs. 6,00,000.00</td></tr><tr><td>2022-23</td><td>0</td><td colspan="2">NiL</td></tr></table></td><td></td></tr>
<tr><td>4) CO, PO attainments are observed to be very poor in many courses. The targets</td><td>During the curriculum revision process the past CO, PO attainments are observed to fix the target COs.</td><td></td></tr>
</table>

may be fixed based on the past performance of the students in that course and POs.	*(Proof: Sample of CO-PO for URR18 & URR24)*	
5) Effort by the faculty in utilizing the seed grant provided by the institute is not observed. A group of faculty may join together and shall utilize the seed grant to carry out research activities leading to publications.	Research groups are formed and faculty is encouraged to apply for seed grant from the institute and utilize to carry out research activities in their respective research fields. *(Proof: Research Groups copy)*	
6) Enhance the skills among the students by introducing value added courses and also organizing training programs on the state of the art technologies.	In the revised curriculum for A.Y.2024-25 following NEP-2020 guidelines, value added courses like Social Empowerment Activities (SEA) and Self-Accomplishment Activities (SAA) are introduced. *(Proof: URR24 Scheme & Syllabi Pg.24-28)*	
7) Need to improve core placements.	Curriculum revision is done according to the inputs from core industries making them as part of BoS. *(Proof: BoS Copy URR24 and list of core placements)*	

Dr. A. Srinivas 29.03.25

(*Name & signature of the Department Academic Coordinator with Date*)

(Dr. V. Venkateshwar Reddy)

29.3.25

(*Name & signature of the Head of Department with Date*)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Introduce industry-aligned electives and interdisciplinary modules in curriculum revision..
2	Create a departmental R&D cell to coordinate proposal writing, mentor young faculty, and track submission timelines
3	Actively promote research groups to utilize institute-provided grants
4	Target SCOPUS/SCI-indexed journals with a department-wide publication strategy.
5	Focus on MoUs with institutes like NITs, IIITs for co-teaching, student exchange

6	Initiate short-term industry-sponsored projects or consultancy in IoT, cloud, and networking
7	Collaborate with industries for semester-long internships and Centers of Excellence.
8	Reignite alumni connections with fundraising goals, mentorship drives, and department boards

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C. Venkatesh *Coordinator, IQAC, KITSW*	Chairperson	29/3/25
2	Prof. M. Sadanandam *Dean, FOET, KU, Warangal*	External Member	
3	Prof. A. Venugopal *Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal*	External Member	
4	Prof. M. Komal Reddy *Registrar, KITSW*	Member	
5	Prof. K. Venumadhav *Dean, Academic Affairs, KITSW*	Member	
6	Prof. M. Veera Reddy *Dean, R&D, KITSW*	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
• Counseling and mentoring students through MYC hour in timetable. • Regularly update the curriculum to include the latest trends and technologies in CSE(Networks) and CSE(IOT), CSE(DS) and CSE(AIML) programs. • Up-to-Date Infrastructure and Practical Learning through State-of-the-Art Lab Facilities, Hands-On Projects. • Incorporate practical labs, simulations, and projects into the curriculum to give students real-world experience. • Use modern teaching tools and technologies (e.g., Learning Management Systems, virtual labs) to enhance the learning experience. • Industry-Academia Collaboration for Real-World Exposure through workshops, guest lectures, hackathons and competitions. • Research and innovations with projects, faculty publications and workshops.	

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: • Classes and labs are adequate. • Placements are good. • Regularly reviewing the curriculum by incorporating insights from the industry. • Utilizing contemporary ICT tools like Kahoot and Quizizz for enhancing the learning process, including the use of these tools for conducting viva sessions in laboratories. • All faculty members are actively enhancing their academic skills through participation in Faculty Development Programs (FDPs), workshops, and obtaining course certifications from MOOC platforms such as SWAYAM-NPTEL, ORACLE University, etc.	• Courses integrated with practical labs, simulations, and hands-on projects • Well-equipped labs including an Industrial IoT lab • 100% pass rate for final-year students • Students are active in internships, workshops, certifications (161 SWAYAM courses)

• Several faculty members hold qualifications in GATE and NET.'A substantial number of faculty members have Ph.Ds	
Weakness: • The cadre ratio is notably inadequate. • No consultancy, research Grants are nil. • Need for improving the number of implementable patents. • Need for placing students with high CTC packages to attract rankers. • There is a scarcity of permanent faculty members. Insufficient funding is a challenge for undertaking research projects. • The preparation and submission of research proposals to various funding agencies are limited due to a lack of bandwidth among the faculty. • Consultancy practices are not meeting the desired standards.	• Cadre ratio is imbalanced (1:4:27 instead of 1:2:6) and Shortage of permanent faculty • Very low number of funded research projects and consultancy works • Minimal number of publications in high-impact journals and no patents
Opportunities: • MoUs with institutes of national importance for student internships and faculty collaborative research projects. • International Collaboration with Universities for possible exchange programs in the areas of student academic programmes & internships and faculty teaching & research. • The demand for Computer Science and Engineering (CSE) Networks specializations is high, driven by their versatility across a broad spectrum of applications in other departmental specializations. • Providing faculty with dedicated time to delve into specialization areas for addressing real-world problems with innovative ideas can lead to impactful research, which can subsequently be applied in proposals submitted to various funding agencies. • Computer Science and Engineering (CSE) specializations offer ample opportunities to incubate novel ideas. • Establishing a thoughtful institutional approach that grants reasonable freedom to both faculty and students is essential in this regard.	• Potential for MoUs with premier institutions and global universities • Leverage industry trends like 5G, AI/ML, and Network Security for impactful research • Align faculty upskilling with industry demands to enhance teaching quality • Boost placement rates with high-CTC offers

Challenges: 1. Engaging in research and consultancy within the field of Computer Science and Engineering specializations. 2. Channeling increased efforts from faculty members to secure research projects and consultancy services. 3. ' Conducting research and providing consultancy services within the realm of Computer Science and Engineering specializations.	• Limited faculty bandwidth for drafting and submitting proposals • Low research output in Scopus/SCI-indexed journals • Lack of structured consultancy practice

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: All faculty members are required to complete course certifications from NPTEL, as mandated by the circular from the principal's office. This initiative aims to enhance the Teaching-Learning process, ultimately benefiting students by equipping them with the necessary skills for successful placements.	Action Plan: 1. Circulated the official circular from the principal's office to all faculty members, clearly outlining the requirement for NPTEL course certification. 2. Provided a list of relevant NPTEL courses for each department or subject area that align with the faculty members' teaching specialties. 3. Guided and assisted faculty members in registering for NPTEL courses via the official portal. Ensure that each faculty member completes their registration on time	
Short term goal 2: Faculty without a Ph.D. is mandated to register for a Ph.D. program in their respective research areas and publish papers in SCOPUS and SCIE indexed journals. Those already enrolled in Ph.D. programs are required to complete their degrees	Action Plan: 1. All faculty members were mandated to register for Ph.D. programs in their respective research areas, ensuring alignment with their academic expertise. 2. Faculty members actively pursued publishing research papers in SCOPUS and SCIE indexed journals, aligning their research with global standards.	

within the stipulated time, demonstrating a substantial number of publications in indexed journals. Additionally, faculty with Ph.D. qualifications is expected to actively submit research proposals to various funding agencies.	3. Faculty members with Ph.D. qualifications were encouraged to actively submit research proposals to various national and international funding agencies. 4. The institution organized workshops and training sessions to enhance the faculty's understanding of the proposal submission process and funding opportunities.	
Short term goal 3: **Enhance Research Collaboration and Secure Initial Funding:** The department aims to actively engage in research collaborations with both national and international institutions and industry partners, focusing on cutting-edge networking technologies.	**Action Plan:** 1. The department initiated discussions with national institutions and industry partners to explore collaborative research opportunities in advanced networking technologies. 2. Faculty members worked together to draft and submit research proposals to multiple funding agencies, focusing on emerging areas in networking, such as 5G, IoT, and network security.	

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): 1. Enhance the quality of teaching by acquiring course certifications from NPTEL and undergoing industry training. This approach aims to instill high-quality teaching practices; ensuring students are well-prepared for securing placements with competitive packages. 2. Enhancing the quality of teaching through re-skilling and up-skilling initiatives from NPTEL and Industry is expected to foster a fresh perspective among faculty members, potentially leading to impactful research endeavors. This, in turn, can attract funding from various agencies. **Action Plan:** • Enrollment in NPTEL Courses: Faculty members have enrolled in NPTEL online	

certification courses to gain advanced knowledge in their respective subjects. • Industry Training Programs: Faculty members have participated in industry-specific training to gain practical insights and hands-on experience in current industry practices. • Integration into Curriculum: Teaching methods have been updated to incorporate the latest industry standards and best practices learned from NPTEL courses and industry training. • Collaboration with Industry Experts: Collaboration with industry professionals and organizations has been established to provide guest lectures, workshops, and internships for students. • **Faculty Participation in Re-skilling and Up-skilling Programs:** Faculty members are regularly attending NPTEL courses, workshops, and conferences to acquire new skills in emerging fields.	

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
1. Several faculty members have acquired Topper and Monitor certifications from SWAYAM-NPTEL. 2. Two faculty members possess TalentNext and Advanced TalentNext certifications, while another faculty member holds CISCO and Advanced CISCO certifications. 3. Additionally, one faculty member from the department is pursuing an advanced certification in AIML from IIT Madras. 4. Currently, two faculty members are recipients of funding. 5. Faculties with Ph.D. qualifications in various Computer Science and Engineering specializations, including CVIP, AIML, IoT, and Networks, are integral members of the department. 6. The department is equipped with an Industrial Internet of Things (IoT), laboratory.	

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
Certificate programs and value added courses shall be conducted to improve the career development opportunities for students	The department has initiated certificate programs on Cybersecurity, Network Simulation using NS2/**NS3,** Ethical Hacking, and Cloud Computing in collaboration with industry experts.	
Innovation and Incubation culture needs to be inculcated among the students through I2RE activities	A dedicated Innovation & Incubation Cell has been established. Students are encouraged to work on research-based projects and participate in hackathons.	
Strong alumni base needs to be established to motivate students to develop a culture of entrepreneurship.	Conducted Alumni Interaction Sessions where successful alumni shared their experiences. Created an Alumni Mentorship Program to guide students on entrepreneurship and career opportunities.	
Efforts may be made to drive students towards higher studies by providing coaching in national level examinations such GATE, GRE, etc.	Organized GATEcoaching sessions by faculty and external experts through T& P cell. Provided access to online learning resources and mock tests for GRE, GATE, and other competitive exams.	
Students shall be encouraged to participate in national/international level technical/cultural events	Students are actively encouraged to participate in Smart India Hackathon (SIH), IEEE Conferences, Codeathons, and Paper Presentation competitions. Financial assistance is provided for reputed events.	
Research output by a way of quality publications, external funded research projects and consultancy needs to be strengthened	Faculty members have been encouraged to publish papers in Scopus and SCI-indexed journals. Proposals for AICTE, DST, and UGC-funded projects have been initiated.	
Faculty have to utilize the seed grant provided by the Institute and work towards publications/projects	The department through institute has allocated the seed grant to faculty members working on innovative projects, leading to prototype development and publications.	

Teachers shall be motivated to pursue PhD	Faculty members without a PhD have been encouraged to enroll in doctoral programs at reputed universities. The institute provides leave benefits and financialsupport for PhD coursework and research activities.	

Dr.V.C.S.Rao 13/5/2025

(*Name & signature of the Department Academic Coordinator with Date*)

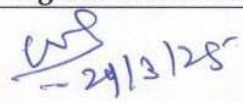
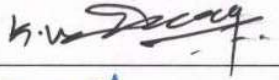
Dr.V.Shankar 19/5/2025

(*Name & signature of the Head of Department with Date*)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Create a departmental R&D cell to coordinate proposal writing, mentor young faculty, and track submission timelines
2	Actively monitor and incentivize usage of internal seed grants for project prototyping
3	Initiate short-term industry-sponsored projects or consultancy in IoT, cloud, and networking
4	Create a High-CTC Training Cell focused on core and product companies
5	Establish interdisciplinary labs for AI, cybersecurity, blockchain in collaboration with industry

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C Venkatesh Coordinator IQAC, KITSW	Chairperson	
2	Prof. M. Sadanandam Dean, FOET KU, Wgl	External Member	
3	Prof . A Venu Gopal Professor (HAG), Dept of ME NIT Warangal	External Member	
4	Prof. M Komal Reddy Registrar, KITSW	Member	
5	Prof. K VenuMadhav Dean, Academic Affairs	Member	
6	Prof. M Veera Reddy Dean, R&D, KITSW	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

1. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. Personalized instructions for holistic approach. 2. Prioritize active learning methods, case studies to foster critical thinking and problem solving skills. 3. Emphasize the practical application of knowledge through workshops, guest lectures and panel discussions. 4. Encourage student involvement in CSR activities to foster a sense of community and leadership development. 5. Regularly practicing the presentations according to the Course Structure in the form of CCS and CRPs.	

2. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: • 88% of faculty are with Ph.D. • Attracting good rankers • Involvement of faculty in departmental activities and major decisions are taken by DAAC.	• Highly qualified and experienced faculty • Active mentorship, personalized instruction, case studies, and CSR-based learning practices
Weakness: • Institute is located in an area with weak industrial presence. • Most of the students have a vernacular background, which might occasionally be a disadvantage when it comes to placements. • Submission of R&D proposals	• No funded research projects or submissions • No active collaborations with industry or academia • Only 35% of students placed
Opportunities: • Increasing trend of engineering students choosing MBA for higher education. • Affordable tuition fee.	• Tap into a motivated, technically-strong cohort • Curriculum can be aligned with future workforce trends and industry expectations

• An environment that facilitates positive student – faculty interaction –specialized advice and mentoring. • Scope for Research activity and Research center recognition of the Department.	
Challenges: • Collaboration with Research Institutes and Foreign Universities. • Adopting the business landscapes and technological advancements • To provide placement and internship opportunities for students as Industrial corridor is out of proximity.	• Geographical constraints limit industry engagement and live projects • No research center recognition; no seed funding utilization • Needs proactive alignment with emerging business and tech trends

3. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: • To design the curriculum to meet the challenges of future work force requirements	**Action Plan:** • To go for change in curriculum in the ensuing academic year	
Short term goal 2: • To train students in communication skills by encouraging them to participate in inter-college events	**Action Plan:** • Motivating students to engage in management activities with zeal in order to foster a spirit of competition	
Short term goal 3: • Contact the alumni to brainstorm and give reality check	**Action Plan:** • Invite alumni to interact with students and give them current inputs and help in internships	

Long Term Goal(s) of the Department	Committee Remarks

Long term goal(s): To Achieve Organizational Excellence **Action Plan:** To achieve excellence through curriculum change, alumni inputs and overall development of students	

4. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
The Department has dedicated faculty members including seven Ph.D holders and one faculty pursuing a Ph.D. The MBA programme enhances students' employability skills and prepares them for the industry needs. The TLP is meticulously structured to integrate academic knowledge with practical abilities, relevant to their work and advantageous for their development. The current imperative is to revitalize and invigorate students through innovation, incubation, research, and entrepreneurship (I2RE). The objective is to inform students on all pertinent issues arising within the operations of Corporate, Government and Non-Governmental Organizations across several business sectors, including Marketing, Human Resource Management, Operations, International Business, Finance, and Information Technology. The students may select from the specializations provided by the institute to cultivate distinct and specialized skill sets for a promising future in the corporate sector. The case study, an educationally beneficial teaching method is also included in the curriculum. It promotes student interaction and encourages exploration in decision-making, problem-solving, and the development of specialized skills and knowledge. Regular management activities are held to empower and develop students' skills in comprehending the contemporary business difficulties encountered by the corporate sector.	

5. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks

The curriculum shall be revised by introducing contemporary courses.	• It is planned to revise the curriculum. • In process of conducting meetings with the stakeholders i.e. Recruiters, Alumni, etc. to revise the curriculum	
Certificate / Value added courses have to be conducted regularly by inviting industry experts.	Industry experts are being invited to deliver expert lecture to the students	
Publications are limited to one or two faculty members more focused efforts are required in publishing papers in quality research journals such as ABDC/SCI/SCOPUS	Faculty are making their best efforts to publish research work in the ABDC/WoS/SCOPUS journals	
Efforts are to be made in getting sponsored research projects and industrial consultancy	Working on submission of the research projects.	
MoUs are to be worked out with industry and academic institutions and activities are to be conducted on a regular basis in order to make the students exposed to the latest developments	Efforts are being taken up for inking MoU with academic institutions and industries	
A dedicated computer lab shall be established in the department	Proposals have been submitted to the administration to establish a dedicated computer lab in the department	
Interactions with the industry experts/alumni have to be arranged on a regular basis to provide career counseling and opportunities to the students	Arranged Panel Discussion and Guest Lecture by the industry persons.	
Department has to put in more efforts to invite companies for campus placements	Efforts in this direction have been taken up.	
Students shall be encouraged to participate in national / international competitions	Students are participating in several events organized by the NIT, Warangal , KU, Warangal and SR University etc. and bagged several prizes including cash prizes.	
The faculty of the department are to be proactive and get trained in NAAC activities and also in maintaining files appropriately	Efforts in this direction have been taken up.	
Department should take initiative in offering a minor programme in Management to B.Tech. students	Minor programme is offered by the department of Management. At present one student from CED is pursuing MINOR degree in Management.	

29/3/25

(Name & signature of the Department Academic Coordinator with Date)

29/3/25

(Name & signature of the Head of Department with Date)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Include courses in digital marketing, fintech, AI in business, business analytics, etc
2	Partner with platforms like Coursera, SWAYAM, or tie up with local startups
3	Submit at least 1–2 minor research projects annually
4	Conduct resume-building workshops, mock interviews, and aptitude training
5	Improve industry readiness through business simulations and live projects

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C. Venkatesh *Coordinator, IQAC, KITSW*	Chairperson	29/3/25
2	Prof. M. Sadanandam *Dean, FOET, KU, Warangal*	External Member	
3	Prof. A. Venugopal *Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal*	External Member	
4	Prof. M. Komal Reddy *Registrar, KITSW*	Member	
5	Prof. K. Venumadhav *Dean, Academic Affairs, KITSW*	Member	
6	Prof. M. Veera Reddy *Dean, R&D, KITSW*	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. Monitoring students' attendance on an hourly basis 2. Critical thinking skills enhancement by practicing presentations on course projects, course patents (CPs) and Course Research Papers (CRPs) 3. Conducting Remedial classes for backlog students 4. Conducting Tutorial classes to improve problem-solving skills and presentation skills 5. Coordinating Student Induction Programme (SIP) on every year for first-year students 6. Handling sessions on Yoga, Universal Human Values in SIP 7. Mentoring the students through class teachers 8. Integrating Innovation Incubation Research and Entrepreneurship and OBLP into course teaching	

I. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: 1. 90% of existing faculty possess doctoral degrees. 2. The average teaching experience of the faculty is more than 15 years. 3. The faculty published more than 100 papers in Peer-reviewed SCI/ Scopus/ UGC CARE journals and conferences. 4. Faculty are updating their knowledge by attending continuous education programs like FDPs, Workshops, Refresher Courses, STTPs, Certification courses of NPTEL, and MOOCS.	• Highly qualified and experienced faculty. • Well-equipped English Language Lab and Mathematics facilities. • Two faculty members received NPTEL Elite Gold certifications.
Weakness: 1. Less number of submissions for research projects. 2. Research guidance.	• Low research project submissions and consultancy activities • Lack of PG programs and minor degrees in Mathematics/Computing

3. Book Publications **4.** Department Research center	
Opportunities: 1. Scope for improvement for more number of research quality publications with qualified faculty 2. Scope for conducting FDPs and Workshops. 3. Encouraging faculty to acquire more online certification courses like MOOCS, SWAYAM, NPTEL, COURSERA courses etc.	• Leverage qualified faculty to secure government/industry-funded projects • Encourage faculty to apply for seed grants and collaborate with IITs/NITs • Expand remedial classes and peer mentoring for rural students
Challenges: 1. Majority of admitted students are from rural and Telugu medium background 2. Majority of admitted students are with lack of basic concepts 2. Orienting students towards OBE system as the admitted students are not properly trained on skill based education at +2 level (Intermediate).	• Address gaps in foundational knowledge and English proficiency • Limited funding for research and infrastructure upgrades

II. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: To minimize the detention of students because of shortage of attendance.	**Action Plan:** Motivating the students to maintain 100% attendance	
Short term goal 2: To minimize the detention due to backlogs in first year subjects.	**Action Plan:** 1. By conducting more effectively the special remedial classes beyond college hours for slow learners. 2. Providing additional Assignments.	
Short term goal 3: Soft and communication skills to be developed to meet the place meet requirements and higher education	**Action Plan:** 1. Continuous Internal Evaluation (CIE) through Lab Manual and Record Book (LMRB) to enhance the individual attention. 2. Remedial/ makeup labs for absentees and to compensate labs on holidays.	

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): To bridge the gap between industry 4.0 and academia. **Action Plan:** To build and develop competencies and skills related to industry 4.0 requirements	

III. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks
1. 100% of existing faculty possess doctoral degrees. 2. The average teaching experience of the faculty is more than 15 years. 3. The faculty published more than 100 papers in Peer-reviewed SCI/ Scopus/ UGC CARE journals and conferences. 4. Faculty performing Additional duties at institute level	

Name of the Faculty	Designation	Additional Duty as
Dr.G.Manjulathadevi	Assistant professor	Academic coordinator
Dr.R.Ramesh	Assistant professor	Faculty-in-charge, Over-all Time Tables (FIOTT)
Dr.D.Rajaiah	Assistant professor	Faculty I/c Examinations

IV. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
Department shall take efforts to start PG programme	Proposed to start after getting University status to the Institute	
Publish more research papers in quality journals	Research Incentives Collaboration Research and Networking Attending Research Training Workshops	
Department may offer a Minor degree programme in Mathematics and Computing	Proposed to start in URR-24 syllabus revision	
Faculty have to put efforts to utilize the seed grant provided by the institute and work towards publications/projects	Allocated sufficient budget to Research and development	

G. Manju Latha Devi

(Name & signature of the Department Academic Coordinator with Date)

(Dr. G. MANJU LATHA DEVI)

29.03.2025

(Name & signature of the Head of Department with Date)

Overall Suggestions / Remarks by Department Academic Audit Committee Members:

S. No.	Areas / activities to be focused for improvement
1	Organize workshops on proposal writing and funding opportunities and Set a target of 2-3 research projects submitted per faculty annually
2	Revise curriculum to include industry-relevant modules
3	Launch a peer-mentoring program for backlog students
4	Establish PG programs and a Mathematics/Computing minor degree and Develop a department research center

Department Academic Audit Committee Members:

S. No.	Name of the Member	Designation	Signature with date
1	Prof. C. Venkatesh *Coordinator, IQAC, KITSW*	Chairperson	29/3/25
2	Prof. M. Sadanandam *Dean, FOET, KU, Warangal*	External Member	
3	Prof. A. Venugopal *Professor (HAG), Dept. of Mechanical Engineering NIT, Warangal*	External Member	
4	Prof. M. Komal Reddy *Registrar, KITSW*	Member	
5	Prof. K. Venumadhav *Dean, Academic Affairs, KITSW*	Member	
6	Prof. M. Veera Reddy *Dean, R&D, KITSW*	Member	

PART-D
DEPARTMENT BEST PRACTICES, SWOC, DISTINCTIVENESS, SHORT TERM & LONG TERM GOALS

I. Best Practices of the department Short Term and Long Term Goals:

Best Practices of the Department	Committee Remarks
1. Monitoring students' attendance on an hourly basis 2. Critical thinking skills enhancement by practicing presentations on course projects, course patents (CPs) and Course Research Papers (CRPs) 3. Conducting Remedial classes for backlog students 4. Conducting Tutorial classes to improve problem-solving skills and presentation skills 5. Conducting Makeup labs for absentees 6. Organizing the National Science Day on every 28th February 7. Coordinating Student Induction Programme (SIP) on every year for first-year students 8. Handling sessions on Yoga, Universal Human Values in SIP 9. Mentoring the students through class teachers	

II. SWOC Analysis

SWOC Analysis of the Department	Committee Remarks
Strengths: 1. 100% of existing faculty possess doctoral degrees. 2. The average teaching experience of the faculty is more than 18 years. 3. The faculty published more than 365 papers in Peer-reviewed SCI/ Scopus/ UGC CARE journals and conferences. 4. Two research projects worth of 61 lakhs	• Highly qualified and experienced faculty • Participation in NPTEL translation for Telugu learners

5. Faculty are updating their knowledge by attending continuous education programs like FDPs, Workshops, Refresher Courses, STTPs, Certification courses of NPTEL, and MOOCS. 6. Most of the faculty are involved in administrative works (NCC Officer, NSS Officer, PRO, ISTE Chairperson, PMC (SAC))	
Weakness: 1. Less number of submissions for research projects. 2. Department Research Centre.	• Few research proposals prepared or submitted • Limited sanctioned projects and consultancy initiatives • No Department Research Centre, limiting in-house Ph.D. supervision
Opportunities: 1. Scope for improvement for more number of research quality publications with qualified faculty 2. Scope for conducting FDPs and Workshops. 3. Encouraging faculty to acquire more online certification courses like MOOCS, SWAYAM, NPTEL, COURSERA courses etc.	• possibility for high-quality publications and research grants
Challenges: 1. Majority of admitted students are from rural and Telugu medium background 2. Majority of admitted students are with lack of basic concepts 2. Orienting students towards OBE system as the admitted students are not properly trained on skill based education at +2 level (Intermediate).	• Many are from rural/Telugu-medium schools with weak foundational knowledge • No MoUs or collaborations for internships, projects, or industry training

III. Short term and Long Term Goals of the department

Short Term Goals of the Department		Committee Remarks
Short term goal 1: To minimize the detention of students because of shortage of attendance.	**Action Plan:** Motivating the students to maintain 100% attendance	

Short term goal 2: To minimize the detention due to backlogs in first year subjects.	**Action Plan:** 1. By conducting more effectively the special remedial classes beyond college hours for slow learners. 2. Providing additional Assignments.	
Short term goal 3: Analytical and experimental skills to be developed and executed to meet the requirements in the higher semesters.	**Action Plan:** 1. Continuous Internal Evaluation (CIE) through Lab Manual and Record Book (LMRB) to enhance the individual attention. 2. Remedial/ makeup labs for absentees and to compensate labs on holidays.	

Long Term Goal(s) of the Department	Committee Remarks
Long term goal(s): To bridge the gap between industry 4.0 and academia. **Action Plan:** To build and develop competencies and skills related to industry 4.0 requirements	

IV. Portray department distinctiveness

Distinctiveness of the Department	Committee Remarks

1. 100% of existing faculty possess doctoral degrees. 2. The average teaching experience of the faculty is more than 18 years. 3. The faculty published more than 365 papers in Peer-reviewed SCI/ Scopus/ UGC CARE journals and conferences. 4. Most of the faculty are involved in administrative works (NCC Officer, NSS Officer, PRO, ISTE Chairperson, PMC (SAC)). 5. Two research projects worth of 61 lakhs.	

6. Department of Physical Sciences has been preparing NBA-Criteria-8 related first year academics and providing to all departments of the institute.
7. Our faculty member is actively contributing to the translation of NPTEL-Swayam's engineering courses, a flagship initiative of the Ministry of Human Resource Development (MHRD), Government of India, specifically serving the Telugu states (AP and Telangana).

Name of the Faculty	Designation	Additional Duty as
Dr. D. Prabhakara Chary	Associate Professor	Public Relations Officer (PRO)
Dr. H. Ramesh Babu	Associate Professor	ISTE Chairman, KITSW student chapter
Dr. Ch. Sateesh Chandra	Associate Professor	NSS Program Officer, KITSW
Capt. Dr. M. Ranadheer Kumar	Assistant Professor	NCC Associate Officer, KITSW
Dr. K. Rajendra Prasad	Assistant Professor	Faculty Incharge, examinations
Dr. K. Rajendra Prasad	Assistant Professor	SWAYAM- NPTEL Translator

V. Previous Academic Audit (AAA 2022-23) remarks and Action Taken Report

Previous Academic Audit remarks	Action Taken Report	Committee Remarks
1. Department shall take efforts to start PG program	Science specific UG programs are not been introduced. Hence no scope for PG program.	
2. Publish more research papers in quality journals	Published more in SCI journals.	
3. Department may offer a Minor program in Mathematics and Computing	Not possible to offer a Minor program in Mathematics and Computing as it is not relevant to PS dept.	
4. Faculty have to put efforts to utilize the seed grant provided by the Institute and work towards publications/ projects	Faculty have been applying projects but unable to get and publishing research papers in reputed journals	

(*Name & signature of the Department Academic Coordinator with Date*)

Dr. Ch Sateesh Chandra

(*Name & signature of the Head of Department with Date*)