

CRITERION 6 - GOVERNANCE, LEADERSHIP AND MANAGEMENT

Key Indicator 6.5 Internal Quality Assurance System

Metric No 6.5.2 The institution reviews its teaching learning process, structures and methodologies of operations and learning outcomes at periodic intervals through IQAC as per norms.

| Sl. No | Contents | File |
|--------|-----------------------|---|
| 1 | Academic Year 2023-24 | Administrative and Academic Audit (AAA) - Institute |
| 2 | | Administrative and Academic Audit (AAA) - Departments |
| 3 | | Course File Audit |




Dr. B. MARUTHU KANNAN, M.E., Ph.D.,
Principal
NPR College of Engineering and Technology
Natham, Dindigul (TN)-624 401



NPR COLLEGE OF ENGINEERING & TECHNOLOGY

An AUTONOMOUS Institution

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Date: 22.07.2024

CIRCULAR

This is to inform that our institution is going to conduct an Academic and Administrative Audit On 27.07.2024. All the HODs and Staff members are asked to extend their co-operations to complete the auditing successfully.



PRINCIPAL

Dr. B. MARUTHU KANNAN, M.E., Ph.D.,
Principal

NPR College of Engineering and Technology
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Copy to:

1. The Administrative Office
2. All HODs - Circulate to all faculties and classes
3. IQAC
4. File





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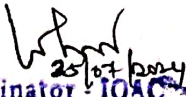


Internal Quality Assurance Cell (IQAC)

External Audit Details

Date: 26.07.2024

| S/N. | Name & Designation & Organization, Auditor | Name & Designation, Organization, Auditee |
|------|---|---|
| 1 | Dr. G. Senthilkumar, Controller of Examination, Bannari Amman Institute of Technology, Sathyamangalam, | Dr. T. Priya, Controller of Examination, NPR College of Engineering and Technology |
| 2 | Dr. P. Sivaraman, Department of Electrical and Electronics Engineering, Professor & Autonomy in-charge, Bannari Amman Institute of Technology, Sathyamangalam, | Dr. K. Kanimozhi, HoD - EEE NPR College of Engineering and Technology |
| 3 | Dr. G. Kumaresan, HoD – Department of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam. | Dr. K.A. Sundararaman, HoD – Mech NPR College of Engineering and Technology |
| 4 | Dr. K. Sadasivam, Prof - Physics, Bannari Amman Institute of Technology, Sathyamangalam, | Dr. P. S. Satheesh Kumar, HoD - Physics NPR College of Engineering and Technology |
| 5 | Dr. G. Kanagaraj, Assistant Professor – II, Department of Computer science and Engineering, Kumaraguru College of Technology, Coimbatore. | Dr. M. Indra Devi, HoD - CSE NPR College of Engineering and Technology |
| 6 | Dr. S. Maheswaran, Associate Professor, Department of Electronics communication Engineering, Kongu Engineering College, Erode. | Dr. G. Mohanbabu, HoD – ECE, NPR College of Engineering and Technology |
| 7 | Dr. J. Jeyanthi Associate Professor, Department of Civil Engineering, Mepco Schlenk Engineering College, Sivakasi. | Dr. K. Baskar, HoD – Civil NPR College of Engineering and Technology |
| 8 | Dr. Senthil V Associate Professor, Chairperson - IT Infrastructure, Thiagarajar School of Management (TSM), Madurai | Dr. B. Velmurugan HoD – MBA NPR College of Engineering and Technology |


 25/07/2024
Coordinator - IQAC
 NPR College of Engineering & Technology
 Natham, Dindigul (Dt)-624 403



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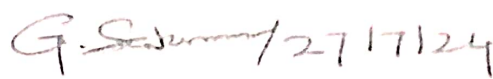
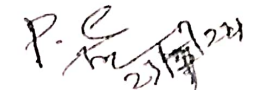
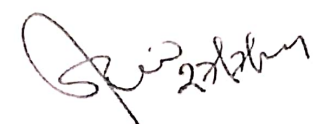
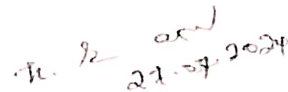
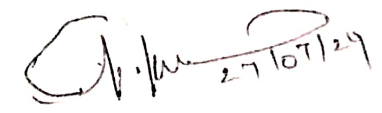

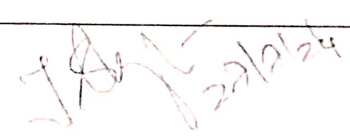
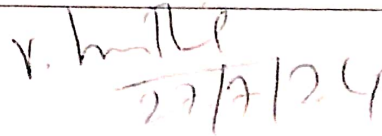
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Internal Quality Assurance Cell (IQAC) Academic and Administrative Audit Attendance Report

Date: 27.07.2024

| S/N. | Name & Designation & Organization, Auditor | Signature with Date |
|------|---|--|
| 1 | Dr. G. Senthilkumar, Controller of Examination, Bannari Amman Institute of Technology, Sathyamangalam, |  27/7/24 |
| 2 | Dr. P. Sivaraman, Department of Electrical and Electronics Engineering, Professor & Autonomy in-charge, Bannari Amman Institute of Technology, Sathyamangalam, |  27/7/24 |
| 3 | Dr. G. Kumaresan, HoD – Department of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam. |  27/7/24 |
| 4 | Dr. K. Sadasivam, Prof - Physics, Bannari Amman Institute of Technology, Sathyamangalam, |  27.07.2024 |
| 5 | Dr. G. Kanagaraj, Assistant Professor Grade – II, Department of Computer science and Engineering, Kumaraguru College of Technology, Coimbatore. |  27/07/24 |
| 6 | Dr. S. Maheswaran, Associate Professor, Department of Electronics Communication Engineering, Kongu Engineering College, Erode. |  27/5/24 |
| 7 | Dr. J. Jeyanthi Associate Professor, Department of Civil Engineering, Mepco Schlenk Engineering College, Sivakasi. |  27/7/24 |
| 8 | Dr. Senthil V Associate Professor, Chairperson - IT Infrastructure, Thiagarajar School of Management (TSM), Madurai |  27/7/24 |



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INTERNAL QUALITY ASSURANCE CELL (IQAC)

Academic and Administrative Audit - Institute

Academic Year: 2023 - 24.

Date: 27.07.24.

College Name : NPR College of Engineering & Technology

Principal Name : Dr. B. Maruthu Kannan

A. Academic calendar

| Sl. No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|--------|---|--|---------------------|
| 1 | Institute Level Academic Calendar Preparedness In line to University | Adhered to University | - |

B. Student Admission

| Sl. No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|--------|---------------------------------|--|---------------------|
| 2 | Percentage of Student Admission | 98%. | - |



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MoE's
INNOVATION CELL
(GOVERNMENT OF INDIA)



INSTITUTION'S
INNOVATION
COUNCIL



SUSTAINABLE
DEVELOPMENT
GOALS

C. Faculty Profile and Faculty Development

| Sl. No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|--------|--|---|--------------------------------------|
| 3 | Total Number of Faculties on Roll | Teaching faculties are available. | - |
| 4 | Number of Faculties with PhD and pursuing PhD | 36 - PhD holders. 27 - Pursuing PhD. | - |
| 5 | Initiatives for funded /Sponsored projects and consultancy works | It was initiated. | Encourage them to get more projects. |
| 6 | Number of Papers published in UGC, SCOPUS, WEB of Science | Totally 24 Paper Published | - |
| 7 | Number of Conference Papers published with ISBN number | 13 were published | - |
| 8 | Number of patents published | 10 | Need to improve. |
| 9 | Number of Faculty Awards | 11 | - |





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D. Infrastructure and Resources

| Sl. No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|--------|---|--|---------------------|
| 10 | Number of Class rooms with ICT Facility | 32 | - |
| 11 | Laboratory facility | Available with all equipment computer facilities with air conditioning | - |
| 13 | Library facilities | Equipped with text books, reference books, Journals, e-books. | - |
| 13 | Number of new Books and Titles in Central library | 337 New books available. | - |
| 14 | Digital Library Utilisation of E-journals, EBooks, Etc | Digital Utilization like e-books, and e-journals added. | - |
| 15 | Stock Verification (Departments and Central Library | Yes, Verified. | - |
| 16 | Website Update | It is done frequently | - |
| 17 | Internet and Wi-fi facility | Adequate computing facilities with LAN & WIFI Connection. | - |
| 18 | Hostel Facility | Seperate hostel for girls and boys with Seperate waiting hall | - |



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| | | | |
|----|---|---|---|
| 19 | Language Lab with required facility | Computers are functional with internet facility. | + |
| 20 | Workshop facility | Available for Students Usage. | - |
| 21 | Transport Facility | Buses available in good condition. | - |
| 22 | Sports/Gym/Yoga Center etc | All the facilities are available | - |
| 23 | RO and Power Supply details | Water cooler and power backups available in the block | - |
| 24 | Safety and Security System | Fire extinguisher and first aid boxes are in usage. CCTV's are available. | - |
| 25 | Green initiatives, Campus Maintenance and Cleanliness | SJTP, Biogas, Solar light, Rain water harvesting are in monitor. Plastic free campus. | - |
| 26 | Seminar/ Conference Hall | Totally 8 Seminar halls available. | - |
| 27 | Medical care usage | Tie up with local primary health centre, Ulupagudi. | - |



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E. Governance and Administration

| Sl. No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|--------|--|---|---------------------|
| 28 | Frequency of Meetings of all Committees and record keeping | Academic Audit Committee, Discipline Committee, Anti-ragging committee and various other committees extend monitoring | - |
| 29 | Faculty and Staff Empowerment Policy | FDP, Group insurance, Advance emerging loan, fees concession. | - |
| 30 | Budget Allocation | The sum of Rs 5,16,00,000 was sanctioned. | - |
| 31 | Budget Utilization | The sum of Rs 500,60,000 was utilized | - |

F. Quality Initiatives

| Sl. No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|--------|---|--|---------------------|
| 32 | Quality certification from National / International forum (NIRF, AISHE, NBA, NAAC, ISO, etc.) | Participated in NIRF, having NBA, NAAC accreditations. | - |
| 33 | Participation in National/ International events (Project Contest) | Regularly attended. | - |
| 34 | Social Activities, Programs organized by NSS/YRC | 16 programs | - |





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MoE's
INNOVATION CELL
(GOVERNMENT OF INDIA)



SUSTAINABLE
DEVELOPMENT
GOALS

G. Student Support System and Progression

| SL No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|-------|--------------------------------------|---|---------------------|
| 35 | Institutional Scholarship, Free ship | Government, management scholarship given. | - |
| 36 | Placement and Graduation Day | Adhered | - |
| 37 | Placement Percentage | 85.17. | - |
| 38 | Alumni Registration and alumni meet | Regularly Conducted. | - |
| 39 | Sports activity | Regularly Conducted. | - |
| 40 | Cultural Activities | Yes | - |
| 41 | EDC Initiatives / Activities | 3 Programs on Entrepreneurship were conducted through EDC cell. | - |
| 42 | Grievance and Redressal Mechanism | Meetings were conducted regularly. | - |





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H. Industry-Academic Interaction

| Sl. No | Audit Parameters | Internal Monitoring and Audit findings | Corrective Measures |
|--------|---|--|---------------------|
| 43 | IPR workshop, Initiatives HR Connect, Industry Innovation | Programs were conducted regularly | - |
| 44 | MOUs and activeness | Made all mou's - 39 | - |

Name and Designation of Academic Audit Expert: Mr.R.Anand, Principal, NPR Polytechnic College, Natham.


INTERNAL AUDITOR

Dr. A. Gopi SAMINATHAN)


EXTERNAL AUDITOR

Mr. R. ANAND PRINCIPAL
NPR PC .





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INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: Civil Engineering

Date of Audit: 27.07.2024

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | | ✓ | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | ✓ | | | |
| | Comments: Ethical skills to be included in the mission. | | | | | |
| | Suggestions for Improvement: Management Skills and Intra Personal skills may be included in Mission. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | | ✓ | |
| | b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | ✓ | | |
| | Comments: Students (Stockholders) are aware about the vision, Mission and PEOs. | | | | | |
| | Suggestions for Improvement: Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | | | ✓ | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | | ✓ | | |
| | Comments: Vision and Mission Matrix with PEOs Should be Specific to Civil Engineering. | | | | | |
| | Suggestions for Improvement: Each PEOs may be consistent with the mission of the department | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------------------|--|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Establishment of Curriculum Development Committee | | | | ✓ | |
| | b. Any proof for reviewing and updating the content of the courses from time to time? | | | | ✓ | |
| | c. Adherence to academic calendar | | ✓ | | | |
| | d. Participation of faculty members related to curriculum development and assessment | | | ✓ | | |
| | Comments: Proof not Available in the academic calendar for curriculum development. | | | | | |
| | Suggestions for Improvement: Suggested to include the curriculum development meetings in the academic calendar. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | ✓ | | |
| | b. If so, whether majority of the students got benefitted? | | ✓ | | | |
| | Comments: Industrial requirements in curriculum. | | | | | |
| | Suggestions for Improvement: Entrepreneur and Industrial experts' suggestions related to practical knowledge may be included in curriculum. | | | | | |

External Audit Report

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | ✓ | | |
| | b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation | | | ✓ | | |
| | Comments: Advanced Topics beyond syllabus is expected | | | | | |
| | Suggestions for Improvement: 1.Core Electives may be incorporated with advanced topics. 2. Training or Online classes (NPTEL) may be suggested for beyond syllabus. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | ✓ | | | |
| | b. Is there proof for faculty members using LMS for the conduction of classes? | | | | ✓ | |
| | c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | | ✓ | |
| | d. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | |
| | Comments: E Learning materials available | | | | | |
| | Suggestions for Improvement: Effective utilization of E- learning resources by the students. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------------------|--|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | | ✓ | |
| | b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | | ✓ | |
| | c. Number of Course Files verified (at least one sample for each year is required) | | | | ✓ | |
| | Comments: High level questions are expected. | | | | | |
| | Suggestions for Improvement: Multiple choice questions of high cognitive level may be included. (Ex. GATE Questions). | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | | ✓ | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | | ✓ | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | ✓ | | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | ✓ | | |
| | Comments: Clarity of students about the assessment and moderations are required. | | | | | |
| | Suggestions for Improvement: Awareness of the students about credit schemes and moderations are suggested. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------------------|--|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | | ✓ | |
| | b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | | ✓ | |
| | c. Number of Course Files verified (at least one sample for each year is required) | | | | ✓ | |
| | Comments: High level questions are expected. | | | | | |
| | Suggestions for Improvement: Multiple choice questions of high cognitive level may be included. (Ex. GATE Questions). | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | | ✓ | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | | ✓ | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | ✓ | | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | ✓ | | |
| | Comments: Clarity of students about the assessment and moderations are required. | | | | | |
| | Suggestions for Improvement: Awareness of the students about credit schemes and moderations are suggested. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | ✓ | | |
| | b. Is the action planned based on the feedback? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: Suggestions for Teaching Learning process in syllabus by the students. | | | | | |
| | Suggestions for Improvement: Students feedback on the revision of syllabus may be incorporated. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Course Articulation Matrix Exists for the Department? | | | ✓ | | | |
| b. Program Articulation Matrix Exists for the Department? | | | ✓ | | | |
| c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | ✓ | | | |
| Comments: Articulation Matrix not available. | | | | | | |
| Suggestions for Improvement: Articulation Matrix may be included in ERP. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | ✓ | | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | | ✓ | | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | | ✓ | | |
| Comments: Assessment measures and rubrics need to be improved. | | | | | | |
| Suggestions for Improvement: Common rubrics for the institution to be adopted. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are Course Outcome targets set and well established for the courses with proper justification? | | | | ✓ | | |
| b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | | | ✓ | | |
| c. Are the action plan satisfactory for courses with COs not attained? | | | | ✓ | | |
| Comments: Satisfactory action plans are required for not attained Cos. | | | | | | |
| Suggestions for Improvement: Specific targets of COs may be established with respect to the specific courses. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | | | ✓ | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: NAAC related documents are available for direct attainment. | | | | | |
| | Suggestions for Improvement: Evidence related to the indirect attainment suggested to improve. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | | ✓ | | |
| b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | | ✓ | | | |
| c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | | |
| Comments: Initiative regarding CO, PO, PSOs attainment is required. | | | | | | |
| Suggestions for Improvement: Measures to improve POs and PSOs may be identified with respect to subjects during department meeting. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|--|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | | ✓ | |
| | b. Students progressing to Higher Education | | | ✓ | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | ✓ | | | |
| | Comments: One student studying in TCE, Madurai. | | | | | |
| | Suggestions for Improvement: Placement proof like ID Card may be collected from students. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | | ✓ | | |
| | b. Awards and Medals for outstanding performance in Cultural | | | ✓ | | |
| | c. Participation in Inter-Institution Events at other Institutions | | | ✓ | | |
| | d. Professional Society/ Chapters and organizing engineering events | | | | ✓ | |
| | Comments: Professional society organized events available. | | | | | |
| | Suggestions for Improvement: Membership for present students in Professional societies are suggested. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | | ✓ | | |
| | b. Is there any proof available for students' feedback on facilities | | | ✓ | | |
| | c. Students involvement in Self Learning | | | ✓ | | |
| | d. Programmes/Initiatives for Career Guidance | | | ✓ | | |
| | e. Entrepreneurship Development | | | ✓ | | |
| | Comments: Students self-learning required to improve. | | | | | |
| | Suggestions for Improvement: Effective utilization of digital library. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | ✓ | | |
| | b. Publications from final year projects | | | ✓ | | |
| | c. Students undertaking field projects/internships | | | ✓ | | |
| | Comments: Conference and UGC care List publications are available. | | | | | |
| | Suggestions for Improvement: 1.Detailed mapping of student's projects with Pos and PSOs may be improved. 2.External guide may include for student's internship projects. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | ✓ | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | ✓ | | |
| | c. Is there any proof for planning and management of the project available? | | ✓ | | | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | ✓ | | | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | ✓ | | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | | ✓ | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | | ✓ | | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | ✓ | | | |
| | Comments: Learning outcomes in the social, ethical and environmental context require more attention. | | | | | |
| | Suggestions for Improvement: External experts (Industry, Alumni) may be invited for project evaluation. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | | ✓ | | |
| | b. Are there any Industry linked laboratories available in the Department? | | ✓ | | | |
| | c. Is there evidence for effective utilization of industry linked laboratories? | | ✓ | | | |
| | d. Are there any courses partially/fully delivered by Industrial expert? | | ✓ | | | |
| | e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | ✓ | | |
| | f. Does the submitted proof is relevant and sufficient for the evaluation? | | ✓ | | | |
| | Comments: Encourage students to do projects linked to industries. | | | | | |
| | Suggestions for Improvement: Credits for Internship and training courses may be included. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| | a. Faculty Cadre Proportion | | ✓ | | | |
| | b. Faculty Qualification | | | ✓ | | |
| | c. Faculty Retention | | | ✓ | | |
| | d. Innovations by the Faculty in Teaching and Learning | | ✓ | | | |
| | e. Faculty participation in FDP/STTP | | | ✓ | | |
| | Comments: Innovative teaching learning is required. | | | | | |

Suggestions for Improvement:

1. Faculty retention and cadre ratio needs improvement.
2. Innovative techniques like Models and MOOC Courses may be introduced.

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | | ✓ | | |
| | b. Undergone Online/ face to face FDPs | | | ✓ | | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | ✓ | | | |
| | Comments: Detailed proof is required for administrative training programs. | | | | | |
| | Suggestions for Improvement: Students projects may be converted into prototypes for receiving funds and grants. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | ✓ | | | |
| | b. Recognized Research guides | | ✓ | | | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | ✓ | | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | | ✓ | | |
| | Comments: SCI/UGC papers are published. | | | | | |

Suggestions for Improvement:
Suggested to improve publications with social relevance in highly indexed journals.

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|---|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | ✓ | | |
| | b. Industrial training for students and faculty members | | | ✓ | | |
| | c. Internships | | | ✓ | | |
| | d. Industrial projects | | | ✓ | | |
| | e. Industry supported labs | | ✓ | | | |
| | f. Industry visits by Students /Faculty members | | | ✓ | | |
| | g. Industrial expert speakers | | | ✓ | | |
| | h. Industrial courses | | ✓ | | | |
| | i. Consultancy | | ✓ | | | |
| | Comments: Industrial courses and consultancy need to improved. | | | | | |
| | Suggestions for Improvement: Structural Engineering Lab may be converted to research and consultancy services. | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

1. Good faculty coordination's.
2. Good Infrastructures.

B. Weaknesses:

- ✓ 1. Evaluation Procedures for the Examinations may be improved (Internal may be Included)

C. Opportunities:

- ✓ 1. Students projects can be funded with seed money from management to encourage them.

D. Challenges:

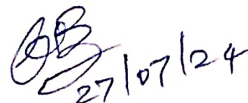
- ✓ 1. Self-Evaluations and Attainments needs improvement.

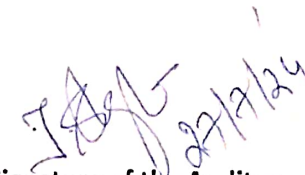
E. Concluding remarks related to Academic Performance of the Department:

1. Available Proofs are to be aligned with respect to NBA requirements.

2. NPTEL course can be used for course dropping and credited with 1 & 1.5 credit based on the duration of the course.

| Details of the External Auditor: | |
|--|--|
| Name: Dr.J.Jeyanthi. | Faculty profile link: mepcoeng.ac.in/jeyanthij |
| Designation: Associate Professor | Contact mail id: jjeyanthi15@mepcoeng.ac.in |
| Department: Civil Engineering | Contact Number: 9486278347 |
| Institute: Mepco Schlenk Engineering College (Autonomous), Sivakasi. | |


27/07/24
Signature of the Auditee
Dr. R. BASKAR


27/7/24
Signature of the Auditor



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

NBA Accredited (B.E., CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2 (f)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: Computer Science and Engineering

Date of Audit: 27.07.2024

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|--|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | ✓ | | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | | ✓ | | |
| | Comments: | | | | | |
| | - | | | | | |
| | Suggestions for Improvement: | | | | | |
| | Need to maintain proof for PO attainment. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | | | ✓ | |
| b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | | ✓ | | |
| Comments: - | | | | | | |
| Suggestions for Improvement: Suggested to conduct stakeholders meeting twice in a year to identify the gaps. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | | ✓ | | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | | ✓ | | |
| | Comments: | | | | | |
| | - | | | | | |
| Suggestions for Improvement: | | | | | | |
| - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| a. Establishment of Curriculum Development Committee | | | | | ✓ | |
| b. Any proof for reviewing and updating the content of the courses from time to time? | | | | ✓ | | |
| c. Adherence to academic calendar | | | | ✓ | | |
| d. Participation of faculty members related to curriculum development and assessment | | | | ✓ | | |
| Comments: - | | | | | | |
| Suggestions for Improvement: Suggested to incorporate the fresher faculty OBE training programme and skill development programme | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|---|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | ✓ | | |
| | b. If so, whether majority of the students got benefitted? | | | ✓ | | |
| | Comments: It was identified with only two elective was offered per class. | | | | | |
| | Suggestions for Improvement: Suggested to have more elective papers for enhanced learning of students. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | ✓ | | |
| | b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: | | | | | |
| Flipped classroom and blended learning is suggested for one course delivery. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | ✓ | | | |
| | b. Is there proof for faculty members using LMS for the conduction of classes? | | ✓ | | | |
| | c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | ✓ | | |
| | d. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| Comments: | | | | | | |
| - | | | | | | |
| Suggestions for Improvement: | | | | | | |
| Suggested to explore and use the ICT tools for course delivery. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------------------|---|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | ✓ | | |
| | b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | ✓ | | |
| | c. Number of Course Files verified (at least one sample for each year is required) | | | | ✓ | |
| | Comments: OOPS, Computer Networks, Python Programming and Mobile Application course files audited. | | | | | |
| | Suggestions for Improvement: Course plan need to have assessment weightage which is missing in all course files. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | ✓ | | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | ✓ | | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | ✓ | | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | ✓ | | |
| | Comments: Assessment pattern to be improved. | | | | | |
| | Suggestions for Improvement: To have twice pattern of the internal assessments. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | | ✓ | |
| | b. Is the action planned based on the feedback? | | ✓ | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: Feedback Collected. Twice feedback needs to be analyzed and action to be taken appropriately. | | | | | |
| | Suggestions for Improvement: - | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | ✓ | | |
| | b. Program Articulation Matrix Exists for the Department? | | | ✓ | | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | ✓ | | |
| | Comments: Targets to be fixed for the individual courses. No CO and PO targets are fixed in the course plan. | | | | | |
| | Suggestions for Improvement: Correction to be done in the course file. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | ✓ | | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | | ✓ | | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | ✓ | | | |
| Comments: To be improved for CO, PO and PSO attainment targets and to be implemented accordingly. | | | | | | |
| Suggestions for Improvement: - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are Course Outcome targets set and well established for the courses with proper justification? | | ✓ | | | |
| | b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | ✓ | | | |
| | c. Are the action plan satisfactory for courses with COs not attained? | | | ✓ | | |
| | Comments: To be improved as per the S.No.12 mentioned | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | | ✓ | | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | |
| | Comments: Attainment targets to be fixed and to be acted accordingly. | | | | | |
| | Suggestions for Improvement: | | | | | |
| | - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | ✓ | | |
| | b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|---|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | ✓ | | |
| | b. Students progressing to Higher Education | | | ✓ | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | ✓ | | | |
| | Comments: One few placement offer letters were audited. Many offer letter contains trainee designation. | | | | | |
| | Suggestions for Improvement: Actual job offer letter to be collected once they successfully complete the training. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | | ✓ | | |
| | b. Awards and Medals for outstanding performance in Cultural | | | ✓ | | |
| | c. Participation in Inter-Institution Events at other Institutions | | | ✓ | | |
| | d. Professional Society/ Chapters and organizing engineering events | | ✓ | | | |
| | Comments: Overall, all activities under S.No.17 to be improved. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | ✓ | | | |
| | b. Is there any proof available for students' feedback on facilities | | ✓ | | | |
| | c. Students involvement in Self Learning | | ✓ | | | |
| | d. Programmes/Initiatives for Career Guidance | | | ✓ | | |
| | e. Entrepreneurship Development | | ✓ | | | |
| | Comments: To be improved with more career development training. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | ✓ | | |
| | b. Publications from final year projects | | | ✓ | | |
| | c. Students undertaking field projects/internships | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: Suggested to take the SIH problem statements for the project work. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | ✓ | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | | ✓ | |
| | c. Is there any proof for planning and management of the project available? | | | ✓ | | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | | ✓ | | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | ✓ | | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | ✓ | | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | | ✓ | | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | ✓ | | | |
| | b. Are there any Industry linked laboratories available in the Department? | | ✓ | | | |
| | c. Is there evidence for effective utilization of industry linked laboratories? | | ✓ | | | |
| | d. Are there any courses partially/fully delivered by Industrial expert? | | ✓ | | | |
| | e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | ✓ | | |
| | f. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: Very less industry interaction was identified. | | | | | |
| | Suggestions for Improvement: Suggested to connect with more industry for academy industry collaboration. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| | a. Faculty Cadre Proportion | | | | ✓ | |
| | b. Faculty Qualification | | | ✓ | | |
| | c. Faculty Retention | | | ✓ | | |
| | d. Innovations by the Faculty in Teaching and Learning | | | ✓ | | |
| | e. Faculty participation in FDP/STTP | | | ✓ | | |
| | Comments: Suggested to link with more industry for collaboration | | | | | |
| | Suggestions for Improvement: | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | ✓ | | | |
| | b. Undergone Online/ face to face FDPs | | | ✓ | | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | ✓ | | | |
| | Comments: No funding and NGO activities identified. | | | | | |
| | Suggestions for Improvement: Given few list for faculty skill enhancement. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | ✓ | | | |
| | b. Recognized Research guides | | | ✓ | | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | ✓ | | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | ✓ | | | |
| | Comments: Faculty need to go for Book Publication, Patterns and Journal Publications. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|---|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | ✓ | | |
| | b. Industrial training for students and faculty members | | | ✓ | | |
| | c. Internships | | | ✓ | | |
| | d. Industrial projects | | ✓ | | | |
| | e. Industry supported labs | | ✓ | | | |
| | f. Industry visits by Students /Faculty members | | | ✓ | | |
| | g. Industrial expert speakers | | | ✓ | | |
| | h. Industrial courses | | ✓ | | | |
| | i. Consultancy | | ✓ | | | |
| | Comments: Suggested few activities to be initiated immediately for the improvements. | | | | | |
| | Suggestions for Improvement: - | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

Good lab system, faculty maintain their course file properly, have good campus environment for student and faculty.

B. Weaknesses:

- ✓ 1. Course file few details missing.
- ✓ 2. Industry linkage.
- ✓ 3. Specialized labs
- ✓ 4. Research centre, Activities, Publication.
- ✓ 5. Feedback action taken reports and follow-up actions

C. Opportunities:

- ✓ 1. Industries mention for collaboration.
- ✓ 2. Funded projects.
- ✓ 3. CoE (Centre of Excellence)
- ✓ 4. Alumni Interaction
- ✓ 5. Consultancy projects.

D. Challenges:

- ✓ 1. Specialized lab for faculty and student research.
- ✓ 2. Faculty research centre

E. Concluding remarks related to Academic Performance of the Department:

Satisfactory. Suggestion given for improvements to be completed as soon as possible.

| Details of the External Auditor: | |
|---|--|
| Name: <u>Dr. G. Kameswarar</u> | Faculty profile link: |
| Designation: <u>AP-II</u> | Contact mail id: <u>kameswarar.g.cse@kct.ac.in</u> |
| Department: <u>CSE</u> | Contact Number: <u>9288466699</u> |
| Institute: <u>Kumaraswami College of Technology</u> | |


Signature of the Auditee 27/7/24
Dr. M. INDRA DEVI


Signature of the Auditor



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

NBA Accredited (B.E. - CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2 (f)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: Information Technology

Date of Audit: 27.07.2024

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|--|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | ✓ | | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: Need to maintain proof for PO attainment. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | | ✓ | |
| | b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: Suggested to conduct stakeholders meeting twice in a year to identify the gaps. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | | ✓ | | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | | ✓ | | |
| | Comments: | | | | | |
| | - | | | | | |
| Suggestions for Improvement: | | | | | | |
| - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------------------|---|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Establishment of Curriculum Development Committee | | | | ✓ | |
| | b. Any proof for reviewing and updating the content of the courses from time to time? | | | ✓ | | |
| | c. Adherence to academic calendar | | | ✓ | | |
| | d. Participation of faculty members related to curriculum development and assessment | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: Suggested to incorporate the fresher faculty OBE training programme and skill development programme | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | ✓ | | |
| | b. If so, whether majority of the students got benefitted? | | | ✓ | | |
| Comments: | | | | | | |
| It was identified with only two elective was offered per class. | | | | | | |
| Suggestions for Improvement: | | | | | | |
| Suggested to have more elective papers for enhanced learning of students. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | | ✓ | | |
| b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | | ✓ | | |
| c. Does the submitted proof is relevant and sufficient for the evaluation | | | | ✓ | | |
| Comments: - | | | | | | |
| Suggestions for Improvement: | | | | | | |
| Flipped classroom and blended learning is suggested for one course delivery. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | | ✓ | | | |
| b. Is there proof for faculty members using LMS for the conduction of classes? | | | ✓ | | | |
| c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | | ✓ | | |
| d. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | | |
| Comments: | | | | | | |
| - | | | | | | |
| Suggestions for Improvement: | | | | | | |
| Suggested to explore and use the ICT tools for course delivery. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | | ✓ | | |
| b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | | ✓ | | |
| c. Number of Course Files verified (at least one sample for each year is required) | | | | | ✓ | |
| Comments: OOPS, Computer Networks, Python Programming and Mobile Application course files audited. | | | | | | |
| Suggestions for Improvement: Course plan need to have assessment weightage which is missing in all course files. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | ✓ | | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | ✓ | | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | ✓ | | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | ✓ | | |
| | Comments: Assessment pattern to be improved. | | | | | |
| | Suggestions for Improvement: To have twice pattern of the internal assessments. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | | ✓ | |
| | b. Is the action planned based on the feedback? | | ✓ | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: Feedback Collected. Twice feedback needs to be analyzed and action to be taken appropriately. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | ✓ | | |
| | b. Program Articulation Matrix Exists for the Department? | | | ✓ | | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | ✓ | | |
| | Comments: Targets to be fixed for the individual courses. No CO and PO targets are fixed in the course plan. | | | | | |
| | Suggestions for Improvement: Correction to be done in the course file. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | ✓ | | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | | ✓ | | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | ✓ | | | |
| Comments: To be improved for CO, PO and PSO attainment targets and to be implemented accordingly. | | | | | | |
| Suggestions for Improvement: - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are Course Outcome targets set and well established for the courses with proper justification? | | ✓ | | | |
| | b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | ✓ | | | |
| | c. Are the action plan satisfactory for courses with COs not attained? | | | ✓ | | |
| | Comments: To be improved as per the S.No.12 mentioned | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | | ✓ | | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | |
| | Comments: Attainment targets to be fixed and to be acted accordingly. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | ✓ | | |
| | b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|---|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | ✓ | | |
| | b. Students progressing to Higher Education | | | ✓ | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | ✓ | | | |
| | Comments: One few placement offer letters were audited. Many offer letter contains trainee designation. | | | | | |
| | Suggestions for Improvement: Actual job offer letter to be collected once they successfully complete the training. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance In Sports | | | ✓ | | |
| | b. Awards and Medals for outstanding performance In Cultural | | | ✓ | | |
| | c. Participation In Inter-Institution Events at other Institutions | | | ✓ | | |
| | d. Professional Society/ Chapters and organizing engineering events | | ✓ | | | |
| | Comments: Overall, all activities under S.No.17 to be Improved. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | ✓ | | | |
| | b. Is there any proof available for students' feedback on facilities | | ✓ | | | |
| | c. Students Involvement in Self Learning | | ✓ | | | |
| | d. Programmes/Initiatives for Career Guidance | | | ✓ | | |
| | e. Entrepreneurship Development | | ✓ | | | |
| | Comments: To be improved with more career development training. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and Individual project mapped with POs and PSOs checked? | | | ✓ | | |
| | b. Publications from final year projects | | | ✓ | | |
| | c. Students undertaking field projects/internships | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: Suggested to take the SIH problem statements for the project work. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | ✓ | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | | ✓ | |
| | c. Is there any proof for planning and management of the project available? | | | ✓ | | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | | ✓ | | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | ✓ | | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | ✓ | | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | | ✓ | | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | | ✓ | | |
| | Comments: - | | | | | |
| Suggestions for Improvement: - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | ✓ | | | |
| | b. Undergone Online/ face to face FDPs | | | ✓ | | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | ✓ | | | |
| | Comments: No funding and NGO activities identified. | | | | | |
| | Suggestions for Improvement: Given few list for faculty skill enhancement. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | ✓ | | | |
| | b. Recognized Research guides | | | ✓ | | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | ✓ | | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | ✓ | | | |
| | Comments: Faculty need to go for Book Publication, Patterns and Journal Publications. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|---|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to Industry- Interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry Involvement in curriculum design and Impact analysis | | | ✓ | | |
| | b. Industrial training for students and faculty members | | | ✓ | | |
| | c. Internships | | | ✓ | | |
| | d. Industrial projects | | ✓ | | | |
| | e. Industry supported labs | | ✓ | | | |
| | f. Industry visits by Students /Faculty members | | | ✓ | | |
| | g. Industrial expert speakers | | | ✓ | | |
| | h. Industrial courses | | ✓ | | | |
| | i. Consultancy | | ✓ | | | |
| | Comments: Suggested few activities to be initiated immediately for the Improvements. | | | | | |
| | Suggestions for Improvement: - | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

Good lab system, faculty maintain their course file properly, have good campus environment for student and faculty.

B. Weaknesses:

1. Course file few details missing.
2. Industry linkage.
3. Specialized labs
4. Research centre, Activities, Publication.
5. Feedback action taken reports and follow-up actions

C. Opportunities:

1. Industries mention for collaboration.
2. Funded projects.
3. CoE (Centre of Excellence)
4. Alumni Interaction
5. Consultancy projects.

D. Challenges:

1. Specialized lab for faculty and student research.
2. Faculty research centre

E. Concluding remarks related to Academic Performance of the Department:

Satisfactory. Suggestion given for Improvements to be completed as soon as possible.

| Details of the External Auditor: | |
|--|---|
| Name: <u>Dr. G. Kameswari</u> | Faculty profile link: |
| Designation: <u>AP-II</u> | Contact mail id: <u>kameswari.g.cse@kct.ac.in</u> |
| Department: <u>CSE IT</u> | Contact Number: <u>9788466699</u> |
| Institute: <u>Kumaraguru College of Technology</u> | |

1/21/24
Signature of the Auditee
C. KALPANA

1/21/24
Signature of the Auditor



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

NBA Accredited (B.E. - CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2 (f)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: Artificial Intelligence & Data Science

Date of Audit: 27.07.2024

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|--|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | ✓ | | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | | ✓ | | |
| | Comments: | | | | | |
| | - | | | | | |
| | Suggestions for Improvement: | | | | | |
| | Need to maintain proof for PO attainment. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | | ✓ | |
| | b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | ✓ | | |
| | Comments: | | | | | |
| | Suggestions for Improvement: | | | | | |
| Suggested to conduct stakeholders meeting twice in a year to identify the gaps. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | | ✓ | | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | | ✓ | | |
| | Comments: | | | | | |
| | - | | | | | |
| | Suggestions for Improvement: | | | | | |
| | - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Establishment of Curriculum Development Committee | | | | ✓ | |
| | b. Any proof for reviewing and updating the content of the courses from time to time? | | | ✓ | | |
| | c. Adherence to academic calendar | | | ✓ | | |
| | d. Participation of faculty members related to curriculum development and assessment | | | ✓ | | |
| Comments: - | | | | | | |
| Suggestions for Improvement: Suggested to incorporate the fresher faculty OBE training programme and skill development programme | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | ✓ | | |
| | b. If so, whether majority of the students got benefitted? | | | ✓ | | |
| | Comments: | | | | | |
| | It was identified with only two elective was offered per class. | | | | | |
| | Suggestions for Improvement: | | | | | |
| Suggested to have more elective papers for enhanced learning of students. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|--|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | ✓ | | |
| | b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: | | | | | |
| | Flipped classroom and blended learning is suggested for one course delivery. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | | ✓ | | | |
| b. Is there proof for faculty members using LMS for the conduction of classes? | | | ✓ | | | |
| c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | | ✓ | | |
| d. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | | |
| Comments: | | | | | | |
| - | | | | | | |
| Suggestions for Improvement: | | | | | | |
| Suggested to explore and use the ICT tools for course delivery. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------------------|---|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | ✓ | | |
| | b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | ✓ | | |
| | c. Number of Course Files verified (at least one sample for each year is required) | | | | ✓ | |
| | Comments: OOPS, Computer Networks, Python Programming and Mobile Application course files audited. | | | | | |
| | Suggestions for Improvement: Course plan need to have assessment weightage which is missing in all course files. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | ✓ | | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | ✓ | | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | ✓ | | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | ✓ | | |
| | Comments: Assessment pattern to be improved. | | | | | |
| | Suggestions for Improvement: To have twice pattern of the internal assessments. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | | ✓ | |
| | b. Is the action planned based on the feedback? | | ✓ | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: Feedback Collected. Twice feedback needs to be analyzed and action to be taken appropriately. | | | | | |
| | Suggestions for Improvement: - | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | ✓ | | |
| | b. Program Articulation Matrix Exists for the Department? | | | ✓ | | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | ✓ | | |
| | Comments: Targets to be fixed for the individual courses. No CO and PO targets are fixed in the course plan. | | | | | |
| | Suggestions for Improvement: Correction to be done in the course file. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | ✓ | | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | | ✓ | | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | ✓ | | | |
| Comments: To be improved for CO, PO and PSO attainment targets and to be implemented accordingly. | | | | | | |
| Suggestions for Improvement: - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are Course Outcome targets set and well established for the courses with proper justification? | | ✓ | | | |
| | b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | ✓ | | | |
| | c. Are the action plan satisfactory for courses with COs not attained? | | | ✓ | | |
| Comments: To be improved as per the S.No.12 mentioned | | | | | | |
| Suggestions for Improvement: - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | | ✓ | | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | |
| | Comments: Attainment targets to be fixed and to be acted accordingly. | | | | | |
| | Suggestions for Improvement: - | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | ✓ | | |
| | b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| Comments: - | | | | | | |
| Suggestions for Improvement: - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|---|--|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | ✓ | | |
| | b. Students progressing to Higher Education | | | ✓ | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | ✓ | | | |
| | Comments: One few placement offer letters were audited. Many offer letter contains trainee designation. | | | | | |
| | Suggestions for Improvement: Actual job offer letter to be collected once they successfully complete the training. | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | | ✓ | | |
| | b. Awards and Medals for outstanding performance in Cultural | | | ✓ | | |
| | c. Participation in Inter-Institution Events at other Institutions | | | ✓ | | |
| | d. Professional Society/ Chapters and organizing engineering events | | ✓ | | | |
| | Comments: Overall, all activities under S.No.17 to be improved. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | ✓ | | | |
| | b. Is there any proof available for students' feedback on facilities | | ✓ | | | |
| | c. Students involvement in Self Learning | | ✓ | | | |
| | d. Programmes/Initiatives for Career Guidance | | | ✓ | | |
| | e. Entrepreneurship Development | | ✓ | | | |
| | Comments: To be improved with more career development training. | | | | | |
| | Suggestions for Improvement: - | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | ✓ | | |
| | b. Publications from final year projects | | | ✓ | | |
| | c. Students undertaking field projects/internships | | | ✓ | | |
| | Comments: - | | | | | |
| | Suggestions for Improvement: Suggested to take the SIH problem statements for the project work. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | ✓ | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | | ✓ | |
| | c. Is there any proof for planning and management of the project available? | | | ✓ | | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | | ✓ | | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | ✓ | | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | ✓ | | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | | ✓ | | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | | ✓ | | |
| | Comments: - | | | | | |
| Suggestions for Improvement: - | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | | ✓ | | | |
| b. Are there any Industry linked laboratories available in the Department? | | | ✓ | | | |
| c. Is there evidence for effective utilization of industry linked laboratories? | | | ✓ | | | |
| d. Are there any courses partially/fully delivered by Industrial expert? | | | ✓ | | | |
| e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | | ✓ | | |
| f. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | | |
| Comments: Very less industry interaction was identified. | | | | | | |
| Suggestions for Improvement: Suggested to connect with more industry for academy industry collaboration. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| | a. Faculty Cadre Proportion | | | | ✓ | |
| | b. Faculty Qualification | | | ✓ | | |
| | c. Faculty Retention | | | ✓ | | |
| | d. Innovations by the Faculty in Teaching and Learning | | | ✓ | | |
| | e. Faculty participation in FDP/STTP | | | ✓ | | |
| | Comments: Suggested to link with more industry for collaboration | | | | | |
| | Suggestions for Improvement: | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | ✓ | | | |
| | b. Undergone Online/ face to face FDPs | | | ✓ | | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | ✓ | | | |
| | Comments: No funding and NGO activities identified. | | | | | |
| | Suggestions for Improvement: Given few list for faculty skill enhancement. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | ✓ | | | |
| | b. Recognized Research guides | | | ✓ | | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | ✓ | | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | ✓ | | | |
| | Comments: Faculty need to go for Book Publication, Patterns and Journal Publications. | | | | | |
| | Suggestions for Improvement: - | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|---|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | ✓ | | |
| | b. Industrial training for students and faculty members | | | ✓ | | |
| | c. Internships | | | ✓ | | |
| | d. Industrial projects | | ✓ | | | |
| | e. Industry supported labs | | ✓ | | | |
| | f. Industry visits by Students /Faculty members | | | ✓ | | |
| | g. Industrial expert speakers | | | ✓ | | |
| | h. Industrial courses | | ✓ | | | |
| | i. Consultancy | | ✓ | | | |
| | Comments: Suggested few activities to be initiated immediately for the improvements. | | | | | |
| Suggestions for Improvement: - | | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

Good lab system, faculty maintain their course file properly, have good campus environment for student and faculty.

B. Weaknesses:

1. Course file few details missing.
2. Industry linkage.
3. Specialized labs
4. Research centre, Activities, Publication.
5. Feedback action taken reports and follow-up actions

C. Opportunities:

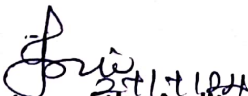
1. Industries mention for collaboration.
2. Funded projects.
3. CoE (Centre of Excellence)
4. Alumni Interaction
5. Consultancy projects.

D. Challenges:

1. Specialized lab for faculty and student research.
2. Faculty research centre

Satisfactory. Suggestion given for improvements to be completed as soon as possible.

| | |
|--|--|
| Details of the External Auditor: | |
| Name: Dr G. Hanagoraj | Faculty profile link: |
| Designation: Dr-II | Contact mail id: hanagoraj.g.cee@kvt.ac.in |
| Department: CSE AE & DS | Contact Number: 9788466699 |
| Institute: Kumaraguru College of Technology. | |


Signature of the Auditee
2-PRISCILLA MARY


Signature of the Auditor
2-107/24



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

NBA Accredited (B.E. - CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2 (f)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: **Electronics and Communication Engineering**

Date of Audit: **27.07.2024**

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Prgramme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | | ✓ | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | | ✓ | | |
| Comments: <ul style="list-style-type: none">A mission statement focused on research and development have to be included | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">The mission statement of the department requires slight modifications to include a focus on higher education. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | | | ✓ | |
| b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | | | ✓ | |
| Comments: <ul style="list-style-type: none">The placement company is not included in the PEO framework, and alumni input is also missing. PE | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">No evidence has been found in the literature for PEO3.A consolidated list of all evidence across various aspects is required. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | | | ✓ | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | | ✓ | | |
| | Comments: <ul style="list-style-type: none">Conduct meeting periodically to review | | | | | |
| | Suggestions for Improvement: <div>Nil</div> | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Establishment of Curriculum Development Committee | | | | | ✓ |
| | b. Any proof for reviewing and updating the content of the courses from time to time? | | | | ✓ | |
| | c. Adherence to academic calendar | | | | | ✓ |
| | d. Participation of faculty members related to curriculum development and assessment | | | | | ✓ |
| Comments: <ul style="list-style-type: none">First year subjects can also be considered for the mapping of department PSOThe marks in the lab records need to be justified. | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">PSO can be without can be without company specificPO mapping needs to be modified | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | ✓ | | |
| | b. If so, whether majority of the students got benefitted? | | | | | |
| | Comments: | | | | | |
| | Nil | | | | | |
| Suggestions for Improvement: | | | | | | |
| <ul style="list-style-type: none">Value Added Course Credit transformation need to be included | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | | ✓ | |
| | b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | | ✓ | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation | | | | ✓ | |
| | Comments: | | | | | |
| | Nil | | | | | |
| Suggestions for Improvement: | | | | | | |
| <ul style="list-style-type: none">It is advised to focus on conferences and journals indexed in Scopus. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | | | | ✓ |
| | b. Is there proof for faculty members using LMS for the conduction of classes? | | | | | ✓ |
| | c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | | | ✓ |
| | d. Does the submitted proof is relevant and sufficient for the evaluation? | | | | | ✓ |
| Comments: Nil | | | | | | |
| Suggestions for Improvement: • Completed MOOC courses can be considered for credit. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | | | ✓ | |
| b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | | ✓ | | |
| c. Number of Course Files verified (at least one sample for each year is required) | | | | ✓ | | |
| Comments: | | | | | | |
| <ul style="list-style-type: none">CO and K level is missing in end semester question paper.More repeated data has been found in the faculty logbook.The lesson plan is printed in one location and handwritten in another. | | | | | | |
| Suggestions for Improvement: | | | | | | |
| <ul style="list-style-type: none">The internal assessment question paper must be aligned with Bloom's Taxonomy. | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|-----------------------|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | | ✓ | | |
| b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | | | ✓ | |
| c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | | | ✓ | |
| d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | | | ✓ | |
| Comments: <ul style="list-style-type: none">• The representation of COs is not uniform across all locations.• The effectiveness of support for slow learners is poor.• A content sheet should be included in the course file. | | | | | | |
| Suggestions for Improvement: | | | | | | |
| NIL | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof available for students' feedback on Teaching Learning process? | | | | ✓ | | |
| b. Is the action planned based on the feedback? | | | ✓ | | | |
| c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | | |
| Comments: <ul style="list-style-type: none">Action taken missing in feedback system | | | | | | |
| Suggestions for Improvement: Feedback mechanism have to improve by including institute level facilities | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | | ✓ | |
| | b. Program Articulation Matrix Exists for the Department? | | | | ✓ | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | | ✓ | |
| | Comments: <ul style="list-style-type: none">The attainment calculation has not been completed.Course End Survey is missing | | | | | |
| Suggestions for Improvement: | | Nil | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | ✓ | | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | | ✓ | | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | | ✓ | | |
| Comments: Nil | | | | | | |
| Suggestions for Improvement: Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are Course Outcome targets set and well established for the courses with proper justification? | | | | ✓ | | |
| b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | | | ✓ | | |
| c. Are the action plan satisfactory for courses with COs not attained? | | | | ✓ | | |
| Comments: <ul style="list-style-type: none">The attainment sheet and percentage of weightage need to be rechecked. | | | | | | |
| Suggestions for Improvement: <div>Nil</div> | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | | ✓ | | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: | | | | | |
| | Nil | | | | | |
| Suggestions for Improvement: | | | | | | |
| Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | ✓ | | |
| | b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | ✓ | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: | | | | | |
| | Nil | | | | | |
| Suggestions for Improvement: | | | | | | |
| Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| a. Placement of outgoing students | | | | ✓ | | |
| b. Students progressing to Higher Education | | | | | ✓ | |
| c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | | ✓ | | | |
| Comments: C. There is no student found in Last 2 years | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Higher studies motivation needs to be carried out.Student placed with less salary package and also more no. of students have got offer in single industry | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | ✓ | | | |
| | b. Awards and Medals for outstanding performance in Cultural | | | ✓ | | |
| | c. Participation in Inter-Institution Events at other Institutions | | | | ✓ | |
| | d. Professional Society/ Chapters and organizing engineering events | | | ✓ | | |
| | Comments: | | | | | |
| | Nil | | | | | |
| Suggestions for Improvement: | | | | | | |
| <ul style="list-style-type: none">• More cultural events and sports participation needed.• Professional society related events have to increased | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | ✓ | | | |
| | b. Is there any proof available for students' feedback on facilities | | ✓ | | | |
| | c. Students involvement in Self Learning | | ✓ | | | |
| | d. Programmes/Initiatives for Career Guidance | | ✓ | | | |
| | e. Entrepreneurship Development | | | ✓ | | |
| Comments: <ul style="list-style-type: none">More programs needed for the all above | | | | | | |
| Suggestions for Improvement: <div>Nil</div> | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | | ✓ | |
| | b. Publications from final year projects | | | | ✓ | |
| | c. Students undertaking field projects/internships | | | ✓ | | |
| | Comments: <ul style="list-style-type: none">There is no Scopus indexed conference paper found. | | | | | |
| | Suggestions for Improvement: <div>Nil</div> | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | ✓ | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | | ✓ | |
| | c. Is there any proof for planning and management of the project available? | | | | ✓ | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | | | ✓ | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | | ✓ | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | | ✓ | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | | | ✓ | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | | | ✓ | |
| | Comments: | | | | | |
| | Nil | | | | | |
| Suggestions for Improvement: | | | | | | |
| Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | | | | ✓ | |
| b. Are there any Industry linked laboratories available in the Department? | | | | | ✓ | |
| c. Is there evidence for effective utilization of industry linked laboratories? | | | | ✓ | | |
| d. Are there any courses partially/fully delivered by Industrial expert? | | | | ✓ | | |
| e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | | | ✓ | |
| f. Does the submitted proof is relevant and sufficient for the evaluation? | | | | | ✓ | |
| Comments: | | | | | | |
| Suggestions for Improvement: | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| a. Faculty Cadre Proportion | | | | ✓ | | |
| b. Faculty Qualification | | | | | ✓ | |
| c. Faculty Retention | | | | ✓ | | |
| d. Innovations by the Faculty in Teaching and Learning | | | | | ✓ | |
| e. Faculty participation in FDP/STTP | | | | | | ✓ |
| Comments: ✓ In faculty cadre less no. of Associate Professor is found. ✓ There is no evidence for the scale of pay, only consolidated pay is found | | | | | | |
| Suggestions for Improvement: • Faculty retention ratio should be high | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | | | ✓ | |
| | b. Undergone Online/ face to face FDPs | | | | | ✓ |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | ✓ | | | |
| | Comments: | | | | | |
| | • No founded research projects | | | | | |
| Suggestions for Improvement: | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|---|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | ✓ | | | |
| | b. Recognized Research guides | | | | ✓ | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | | ✓ | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | | ✓ | | |
| | Comments: <ul style="list-style-type: none">More publication needed.No incentives found for paper publication. | | | | | |
| | Suggestions for Improvement: | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | | ✓ | |
| | b. Industrial training for students and faculty members | | | | ✓ | |
| | c. Internships | | | ✓ | | |
| | d. Industrial projects | | ✓ | | | |
| | e. Industry supported labs | | | ✓ | | |
| | f. Industry visits by Students /Faculty members | | | | ✓ | |
| | g. Industrial expert speakers | | | | ✓ | |
| | h. Industrial courses | | | | ✓ | |
| | i. Consultancy | | ✓ | | | |
| Comments: • There is no consultancy work found | | | | | | |
| Suggestions for Improvement: | | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

- The infrastructure is good, and there are a sufficient number of centers of excellence available.

B. Weaknesses:

- A weakness is the lack of consultancy and funded projects.
- Additionally, counseling needs to be tailored to address individual student problems.
- Research publication is poor.
- Less no. of student's certification in NPTEL courses.

C. Opportunities:

- Centre of Excellence can be efficiently utilized by the students and through we can get consultancy and project work from the industry.
- By improving technical skills of students by giving skill based training through Tinkering Lab.

D. Challenges:

- We have to cope up with students having less cut-off.
- Anna University End Semester Examination result is poor.

E. Concluding remarks related to Academic Performance of the Department:

- For future development, it is mandate to get funded projects and consultancy.
- To improve students' technical skills, it is essential to develop a long-term plan that includes curriculum enhancement, industry collaboration, hands-on learning opportunities, and continuous feedback mechanisms.

| Details of the External Auditor: | |
|---|--|
| Name: Dr.S.Maheswaran | Faculty profile link: https://sites.google.com/a/kongu.edu/maheswaran-s-ece/ |
| Designation: ASP | Contact mail id: mmaheswaran_eie@kongu.ac.in |
| Department: ECE | Contact Number: 9842811344 |
| Institute: Kongu Engineering College, Perundurai, Erode | |

Signature of the Auditee

Dr. G. Mohan Babu
Prof & Head / ECE

Academic and Administrative Audit

NPRCET, Nalram

Signature of the Auditor

27/July 2024
Dr. MAHESWARAN-S
ASP / ECE
Kongu Engineering College
Erode

External Audit Report



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

NBA Accredited (B.E. - CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2 (f)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: EEE

Date of Audit: 27.7.24

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Does the Vision indicate the aspirations of the department? | | | | | YES | |
| b. Does the Mission statements help to achieve the Vision of the department? | | | | YES | | |
| Comments: Mission Statements more specific and need to be strengthened | | | | | | |
| Suggestions for Improvement: Need to cover all aspects of EEE | | | | | | |



| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | | YES | |
| | b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | | YES | |
| | Comments: Available in record note, Event Flier,newsletter, magazine | | | | | |
| | Suggestions for Improvement: Event specific Pos need to be specified instead at all | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | | | YES | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | | YES | | |
| | Comments: Missions and PEOs mapping available but need improvement | | | | | |
| | Suggestions for Improvement: PEOs have to be reframed and mapped with missions | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------------------|--|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Establishment of Curriculum Development Committee | | | | YES | |
| | b. Any proof for reviewing and updating the content of the courses from time to time? | | | YES | | |
| | c. Adherence to academic calendar | | | | | |
| | d. Participation of faculty members related to curriculum development and assessment | | | | YES | |
| | Comments: No evidence of stakeholders feedback for developing curriculum | | | | | |
| | Suggestions for Improvement: Stakeholders list has to be prepared and feedback to be collected analysed and incorporated through PAC,DAC,BOS&ACM | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | YES | | | |
| | b. If so, whether majority of the students got benefitted? | | NO | | | |
| | Comments: Few evidence like Centre of Excellence ,internship ae available but need to be improved. | | | | | |
| | Suggestions for Improvement: Industry courses need to be included in online/offline | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|--|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | | YES | |
| | b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | | YES | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation | | | | YES | |
| | Comments: Available | | | | | |
| | Suggestions for Improvement: Peer Teaching „Group Discussion need to be introduced | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | | | YES | | |
| b. Is there proof for faculty members using LMS for the conduction of classes? | | | | YES | | |
| c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | | YES | | |
| d. Does the submitted proof is relevant and sufficient for the evaluation? | | | | YES | | |
| Comments: GOOD | | | | | | |
| Suggestions for Improvement: | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------------------|---|-----------|-------------|--------------------------------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | Not | Not available for analysis but | | |
| | b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | | | |
| | c. Number of Course Files verified (at least one sample for each year is required) | | | | | |
| | Comments: 3 internal Tests+3 Cycle Tests +3 Assignments is not suitable | | | | | |
| | Suggestions for Improvement: 2 Internal Tests +1 Optional Tests +2 Assignments is recommended | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | YES | | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | YES | | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | | YES | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | YES | | | |
| | Comments: Need to be improved | | | | | |
| | Suggestions for Improvement: Question are prepared as per Cos and revised blooms level is to be restricted within for written exam | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | | YES | |
| | b. Is the action planned based on the feedback? | | | | YES | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | YES | |
| | Comments: Frequency of feedback need to be improved | | | | | |
| | At least three times in a semester | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | | YES | |
| | b. Program Articulation Matrix Exists for the Department? | | | | YES | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | | YES | |
| | Comments: No Evidence of CO assessment | | | | | |
| | Suggestions for Improvement: CO assessment need to be in practice | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | YES | | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | | YES | | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | | YES | | |
| Comments: CO Indirect Assessment not included | | | | | | |
| Suggestions for Improvement: Course exit survey need to be included | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are Course Outcome targets set and well established for the courses with proper justification? | | YES | | | |
| | b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | NO | | | |
| | c. Are the action plan satisfactory for courses with COs not attained? | | NO | | | |
| | Comments: Course Outcomes need to be calculated every semester | | | | | |
| Suggestions for Improvement: Based on CO attainments Cos has to be revised or refined | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | | | YES | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | YES | | | |
| | Comments: Indirect Mapping not available | | | YES | | |
| | | | | | | |
| | Suggestions for Improvement: Need to include indirect assessment method | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | YES | | | |
| | b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | YES | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | YES | | | |
| | Comments: No evidence of Cos action taken report | | | | | |
| | Suggestions for Improvement: Cos attainment need to be calculated and gap are analyzed and take the action appropriately | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|--|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | | YES | |
| | b. Students progressing to Higher Education | | | YES | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | YES | | | |
| | Comments: NO evidence of GATE/CAT /Govt Exam Participation | | | | | |
| | Suggestions for Improvement: Create a support system to provide training and assessment of above | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | | YES | | |
| | b. Awards and Medals for outstanding performance in Cultural | | | | YES | |
| | c. Participation in Inter-Institution Events at other Institutions | | | YES | | |
| | d. Professional Society/ Chapters and organizing engineering events | | | YES | | |
| | Comments: Awards and Medal winners details available for internal marks | | | | | |
| | Suggestions for Improvement: CO and extra curricular activites ,credit course /non credit course may be included. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | | | YES | |
| | b. Is there any proof available for students' feedback on facilities | | | YES | | |
| | c. Students involvement in Self Learning | | NO | | YES | |
| | d. Programmes/Initiatives for Career Guidance | | | | | |
| | e. Entrepreneurship Development | | No | | | |
| | Comments: c & e not available | | | | | |
| | Suggestions for Improvement: Motivate self learning and entrepreneurship | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | | YES | |
| | b. Publications from final year projects | | | | YES | |
| | c. Students undertaking field projects/internships | | 4A | | | |
| | Comments: No evidence of field project | | | | | |
| | Suggestions for Improvement: Field project need to be improved. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | YES | | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | YES | | |
| | c. Is there any proof for planning and management of the project available? | | | YES | | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | YES | | | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | | | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | YES | | | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | YES | | | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | YES | | | |
| | Comments: The above missing points need to be included in assessment | | | | | |
| Suggestions for Improvement: | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | | | | YES | |
| b. Are there any Industry linked laboratories available in the Department? | | | | YES | YES | |
| c. Is there evidence for effective utilization of industry linked laboratories? | | | | YES | | |
| d. Are there any courses partially/fully delivered by Industrial expert? | | | YES | | YES | |
| e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | | | YES | |
| f. Does the submitted proof is relevant and sufficient for the evaluation? | | | | YES | | |
| Comments: Need to improve | | | | | | |
| Suggestions for Improvement: Partial delivery of courses may be included | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| | a. Faculty Cadre Proportion | | | | Yes | |
| | b. Faculty Qualification | | | | YES | |
| | c. Faculty Retention | | | | YES | |
| | d. Innovations by the Faculty in Teaching and Learning | | | | YES | |
| | e. Faculty participation in FDP/STTP | | | | YES | |
| | Comments: Good | | | | | |
| | Suggestions for Improvement: | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | | YES | | |
| | b. Undergone Online/ face to face FDPs | | | YES | | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | YES | | | |
| | Comments: NPTEL ,FDPs STTPs need for all | | | | | |
| | Suggestions for Improvement: Atleast one per year | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | YES | | | |
| | b. Recognized Research guides | | | | YES | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | YES | | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | | YES | | |
| | Comments: Started the practice | | | | | |
| | Suggestions for Improvement: Domain specific areas need to be applied | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | YES | | |
| | b. Industrial training for students and faculty members | | | YES | | |
| | c. Internships | | | | YES | |
| | d. Industrial projects | | | YES | | |
| | e. Industry supported labs | | | | YES | |
| | f. Industry visits by Students /Faculty members | | | | YES | |
| | g. Industrial expert speakers | | | YES | | |
| | h. Industrial courses | | YES | | | |
| | i. Consultancy | | YES | | | |
| | Comments: Need to be improved | | | | | |
| Suggestions for Improvement: Industry Academia interaction to be added based on targets. | | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

1. Faculty Cooperations
2. Faculty Competency
3. Online resources from library
4. Faculty Appraisal

B. Weaknesses:

- 1.Student Participation in External Events
- 2.Publications
- 3.CO attainments
- 4.CO gap analysis
- 5.Action Taken

C. Opportunities:



- 1.NPTEL Course
- 2.Curriculum Development

D. Challenges:

- 1.Student Level of incoming



1. Curriculum Development with flexibility
2. Flexibility in assessment
3. Stakeholders feedback
4. Lesson Plan format need to be change


Signature of the Auditee


Signature of the Auditor
P. SIVAKUMAR



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

NBA Accredited (B.E. - CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2(f)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: Mechanical Engineering

Date of Audit: 27.07.2024

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | | ✓ | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | | | ✓ | |
| | Comments: Vision and mission are verified and suggestion given to modify the concent | | | | | |
| | Suggestions for Improvement: Institution vision may be changed Mission update is also suggested | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | ✓ | | |
| | b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | ✓ | | |
| | Comments: Vision mission and PEOs are published in website curriculum and Class room | | | | | |
| | Suggestions for Improvement: We have to educate the vision and mission in the class room | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | | | ✓ | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | | | ✓ | |
| | Comments: | | | | | |
| | PEOs may be reframed by updating the assessment | | | | | |

| | | | | | | |
|---|---|-------------------|-------------|----------|-------------|------------------|
| | Suggestions for Improvement: | | | | | |
| S/N | Criteria | Relevance | Evaluation | | | |
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Establishment of Curriculum Development Committee | | | | ✓ | |
| | b. Any proof for reviewing and updating the content of the courses from time to time? | | | | ✓ | |
| | c. Adherence to academic calendar | | | | Yes | |
| | d. Participation of faculty members related to curriculum development and assessment | | | | ✓ | |
| Comments: Minutes and approval committees are followed, all faculties in the allied departments are attended the meeting | | | | | | |
| Suggestions for Improvement: Action taken report should be signed by head of the department and IQAC | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | | ✓ | |
| | b. If so, whether majority of the students got benefitted? | | | | ✓ | |

| | | | | | | |
|-------------------------------------|---|--------------------------------|--------------------|-----------------|--------------------|-------------------------|
| | Comments: The one credit courses and layer learning courses should be introduced, Need to introduces in the fifth semester onwards | | | | | |
| | Suggestions for Improvement: — | | | | | |
| S/N | Criteria | Relevance | Evaluation | | | |
| D. Teaching Learning Process | | | | | | |
| 6. | <i>Methodologies used for enhancing learning experiences</i> | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | <i>Not Evident</i> | <i>Emerging</i> | <i>Established</i> | <i>Highly Developed</i> |
| | a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | | ✓ | |
| | b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | | ✓ | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation | | | | ✓ | |
| | Comments: Online materials, e-learning content should be developed and avail to the students | | | | | |
| | Suggestions for Improvement: — | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | | ✓ | | |
| | b. Is there proof for faculty members using LMS for the conduction of classes? | | | ✓ | | |
| | c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | | ✓ | |

| | | | | |
|--|--|--|---|--|
| d. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | |
| Comments: Smart board should be fixed in every class rooms, NPTEL materials shared through ERP software | | | | |
| Suggestions for Improvement: More e-materials should be given to the students including social relevant sample- E- content / video may be provided | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | | | ✓ | |
| b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | | | ✓ | |
| c. Number of Course Files verified (at least one sample for each year is required) | | | | | ✓ | |
| Comments: Need to frame the questions based in RBT and weightages divided as per the norms (60% R&U, 20%-40% of High level) Course files are verified | | | | | | |
| Suggestions for Improvement: CO attainment of each test and end semester examinations may be added. Remedial test assessment report should be added, | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | ✓ | | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | ✓ | | |

| | | | | |
|--|--|---|---|--|
| c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | ✓ | | |
| d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | ✓ | |
| Comments: Balance between the end semester examination and continuous evaluation need to updated | | | | |
| Suggestions for Improvement: Making need to be improved, CO attainment should be framed | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | ✓ | | |
| | b. Is the action planned based on the feedback? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: Course end survey added in each file. Mid of the course, student feedback session may be conducted the action plan should be attached | | | | | |
| | Suggestions for Improvement: Student feedback should be included in the course file | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | | ✓ | |
| | b. Program Articulation Matrix Exists for the Department? | | | | ✓ | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | | ✓ | |
| Comments: CO PO should be elaborated. Course outcomes need to be modified by accounting the extracurricular and co-curricular activities | | | | | | |
| Suggestions for Improvement: Matrices should be reframed as suggested | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | | ✓ | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | | | ✓ | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | | | ✓ | |
| Comments: — | | | | | | |
| Suggestions for Improvement: Stake holder feedback, alumni member feedback are maintained in document | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are Course Outcome targets set and well established for the courses with proper justification? | | | ✓ | | |
| | b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | | ✓ | | |
| | c. Are the action plan satisfactory for courses with COs not attained? | | | ✓ | | |
| | Comments: Course outcome need to modify, respect to extra activities, presentation, self-learning etc.. | | | | | |
| | Suggestions for Improvement: CO target fixing need to update | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | | | ✓ | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | | | ✓ | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | |
| | Comments: Po & PSO matrix available Indirect attainment documents are verified | | | | | |
| | Suggestions for Improvement: Assessment details documents are maintained | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | ✓ | | |
| | b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | | ✓ | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | ✓ | | |
| | Comments: Action taken report maintained. It is counter signed /verified by IQAC coordinator | | | | | |
| | Suggestions for Improvement: CO targets revision targets are need to maintained | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|---|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | | ✓ | |
| | b. Students progressing to Higher Education | | | ✓ | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | ✓ | | | |
| | Comments: Placement recorded are verified, 3-year data's available | | | | | |

Suggestions for Improvement:

Higher studies, progress need to improved, motivate the students to do higher studies. Competitive exam, GATE/CAT should be improved.
Awareness session should be arranged to the students

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | | | ✓ | |
| | b. Awards and Medals for outstanding performance in Cultural | | | | ✓ | |
| | c. Participation in Inter-Institution Events at other Institutions | | | | ✓ | |
| | d. Professional Society/ Chapters and organizing engineering events | | | ✓ | | |
| | Comments: Documents are available. Try to add the extracurricular activities into curriculum map with POs | | | | | |
| | Suggestions for Improvement: Society based activated must be improved | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | | ✓ | | |
| | b. Is there any proof available for students' feedback on facilities | | | | ✓ | |
| | c. Students involvement in Self Learning | | | ✓ | | |
| | d. Programmes/Initiatives for Career Guidance | | | | ✓ | |

| | | | | |
|--|--|---|--|--|
| e. Entrepreneurship Development | | ✓ | | |
| Comments: Student feedback file available, mentor document verified, self-learning technological advancement ED development- Students may be improved | | | | |
| Suggestions for Improvement: Career guidance programme may be conducted to all students | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|-----------------------------------|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | | ✓ | | |
| b. Publications from final year projects | | | | ✓ | | |
| c. Students undertaking field projects/internships | | | | ✓ | | |
| Comments: Project selection assessment rubrics, individual students' contribution, variation in assessment should be added | | | | | | |
| Suggestions for Improvement: Industry based project should be improved Projects rubrics need changes | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | | ✓ | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | | ✓ | |
| | c. Is there any proof for planning and management of the project available? | | | | ✓ | |

| | | | | |
|---|--|---|---|--|
| d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | | ✓ | |
| e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | ✓ | |
| f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | ✓ | |
| g. Is there a differentiated marking scheme observable for individual students in a group project? | | ✓ | | |
| h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | ✓ | | |
| Comments: Marking patten need to elaborate in detail | | | | |
| Suggestions for Improvement: Plagiarism report may be added in the report, interdisciplinary project may be promoted, publication of report must be done, IPR filing maybe improved/Added | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | | | | ✓ | |
| b. Are there any Industry linked laboratories available in the Department? | | | | ✓ | | |
| c. Is there evidence for effective utilization of industry linked laboratories? | | | | | ✓ | |
| d. Are there any courses partially/fully delivered by Industrial expert? | | | ✓ | | | |
| e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | | | | ✓ |
| f. Does the submitted proof is relevant and sufficient for the evaluation? | | | | | ✓ | |
| Comments: Center of excellence, industry-based facts are to be improved | | | | | | |
| Suggestions for Improvement: Industry defines problems, industry related labs, MOU to be done with MNCs, faculty training, students' internships should be done | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| | a. Faculty Cadre Proportion | | | | ✓ | |
| | b. Faculty Qualification | | | ✓ | | |
| | c. Faculty Retention | | | ✓ | | |
| | d. Innovations by the Faculty in Teaching and Learning | | | | ✓ | |
| | e. Faculty participation in FDP/STTP | | | | ✓ | |
| Comments: Two candidates are completed PhD, all are pursuing PhD, one candidate submitted thesis, patent filed by the faculty members, all faculty members attended FDP/ STTP courses | | | | | | |

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|--------------------------------|
| Suggestions for Improvement: — |
|--------------------------------|

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | | ✓ | | |
| | b. Undergone Online/ face to face FDPs | | | | ✓ | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | ✓ | | | |
| | Comments: Organizing the FDP should be improved, institute funded programs are offered | | | | | |
| | Suggestions for Improvement: — | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | ✓ | | | |
| | b. Recognized Research guides | | | ✓ | | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | | ✓ | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | | ✓ | | |

Comments:

Research innovation, Book chapter are moderate, the necessary action should be taken for the improvement

Suggestions for Improvement:

Publication targets may be fixed to the faculty members

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | | ✓ | |
| | b. Industrial training for students and faculty members | | | | ✓ | |
| | c. Internships | | | | ✓ | |
| | d. Industrial projects | | | ✓ | | |
| | e. Industry supported labs | | | ✓ | | |
| | f. Industry visits by Students /Faculty members | | | | ✓ | |
| | g. Industrial expert speakers | | | | ✓ | |
| | h. Industrial courses | | ✓ | | | |
| | i. Consultancy | | ✓ | | | |
| Comments: Consultancy from the industry need improvement | | | | | | |
| Suggestions for Improvement: Industry partially / fully delivered courses to be develop | | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

- Faculty cadre ratio, seminar/ workshop organized, laboratory infrastructure

B. Weaknesses:

- Consultancy, research, industry-oriented activities, student project development, faculty retention

C. Opportunities:

- To frame/ develop new industry-oriented curriculum. Faculty research, activities (NIT registered PhDs)
- Course content development by the establishment member of faculties
- Entrepreneur development

D. Challenges:

- Research funding proposal, publications, IPR, reaching the industries for interaction
- Student quality (admission)

E. Concluding remarks related to Academic Performance of the Department:

- According to autonomous point, academics curriculum development needs more changes
- Course outcome measurement and correlations are need improvement
- Industry oriented courses(partial/fully) should be incorporated

| Details of the External Auditor: | |
|--|---|
| Name: Dr. G. Kumaresan | Faculty profile link: https://www.bitsathy.ac.in/departments/faculty/kumaresan-g/#mechanical-engineering |
| Designation: Professor & Head | Contact mail id: hodmech@bitsathy.ac.in |
| Department: Mechanical Engineering | Contact Number: 9524119045 |
| Institute: Bannari Amman Institute of Technology | |


Signature of the Auditee

Dr. K. A. Sundararaman, Professor & Head


Signature of the Auditor

Dr. G. Kumaresan M.E., Ph.D. (NITT)
Professor & Head
Department of Mechanical Engineering
Bannari Amman Institute of Technology
Sathyamangalam - 638 401
Erode District. Tamil Nadu, India



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

NBA Accredited (B.E. - CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2 (f)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 – 2024

Audit Report

Department: Science & Humanities

Date of Audit: 27/07/2024

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | ✓ | | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | | ✓ | | |
| | Comments: Vision & Mission statements to be restructured. | | | | | |
| | Suggestions for Improvement: Vision statement to be stated by considering the milestones of the department for another 15 years and above. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------------------|---|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Establishment of Curriculum Development Committee | | | | ✓ | |
| | b. Any proof for reviewing and updating the content of the courses from time to time? | | | | ✓ | |
| | c. Adherence to academic calendar | | | | ✓ | |
| | d. Participation of faculty members related to curriculum development and assessment | | | | ✓ | |
| | Comments: NIL | | | | | |
| | Suggestions for Improvement: It is suggested to conduct department advisory board meeting comprising of internal members of faculty and it has to be documented prior to the conduct of BOS meeting. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | | ✓ | |
| | b. If so, whether majority of the students got benefitted? | | ✓ | | | |
| | Comments: <ul style="list-style-type: none">Available for physics, mathematics and English departments. | | | | | |
| | Suggestions for Improvement: Three numbers of open electives in each discipline to be provided for higher semesters under basic science stream. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | ✓ | | |
| | b. Delivery details of content beyond syllabus satisfies the industrial expectations | | ✓ | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation | | | ✓ | | |
| | Comments: Content beyond syllabus under each unit need to be incorporated. | | | | | |
| | Suggestions for Improvement: Problem solving strategies to be extended to physics and chemistry departments with respect to core field of study across all the engineering departments | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|------------------------------|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | | | ✓ | |
| | b. Is there proof for faculty members using LMS for the conduction of classes? | | | | ✓ | |
| | c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | | ✓ | |
| | d. Does the submitted proof is relevant and sufficient for the evaluation? | | | | ✓ | |
| | Comments: NIL | | | | | |
| | Suggestions for Improvement: NIL | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | ✓ | | |
| | b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | ✓ | | |
| | c. Number of Course Files verified (at least one sample for each year is required) | | | ✓ | | |
| | Comments: | | | | | |
| | Quality of internal assessment question paper and semester examination question paper needs improvement. | | | | | |
| Suggestions for Improvement: Bloom's taxonomical verbs to be considered while setting the question papers | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|--|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | ✓ | | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | | ✓ | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | | ✓ | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | | | ✓ | |
| | Comments: a. This criteria needs attention | | | | | |
| | Suggestions for Improvement: Lot (Lower Order Thinking) and hot (High Order Thinking) to be incorporated in the question paper to achieve all the three parameters. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | | ✓ | |
| | b. Is the action planned based on the feedback? | | | | ✓ | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | ✓ | | | |
| | Comments: No proof is available | | | | | |
| | Suggestions for Improvement: All the data should be available with concerned HOD | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | | ✓ | |
| | b. Program Articulation Matrix Exists for the Department? | | | | ✓ | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | | ✓ | |
| | Comments: NIL | | | | | |
| | Suggestions for Improvement: NIL | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | | ✓ | |
| | b. Is the action planned based on the feedback? | | | | ✓ | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | ✓ | | | |
| | Comments: No proof is available | | | | | |
| | Suggestions for Improvement: All the data should be available with concerned HOD | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | | | ✓ | |
| | b. Program Articulation Matrix Exists for the Department? | | | | ✓ | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | | | ✓ | |
| | Comments: NIL | | | | | |
| | Suggestions for Improvement: NIL | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | ✓ | | |
| | b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | ✓ | | |
| | c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | ✓ | | | |
| | Comments: a. Clear b. Clear c. To be documented | | | | | |
| | Suggestions for Improvement: This has to be prepared by subject handling member of a particular course after the conduct of all the exams conducted. | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are Course Outcome targets set and well established for the courses with proper justification? | | ✓ | | | |
| | b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | ✓ | | | |
| | c. Are the action plan satisfactory for courses with COs not attained? | | ✓ | | | |
| | Comments: Target and action plan are not available with the department | | | | | |

| | |
|---|--|
| Suggestions for Improvement: 1. Target for Cos to be fixed by the department at the time of advisory board meeting 2. Action plan for slow learners at the end of each test to be documented and implemented. | |
|---|--|

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | ✓ | | | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | ✓ | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | ✓ | | | |
| | Comments: No data is available in the department | | | | | |
| | Suggestions for Improvement: Individual faculty has to prepare for the courses handled by them | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------------|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | | | |
| | b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | | | |
| | Comments: Not Applicable | | | | | |

| | |
|--|------------------------------|
| | Suggestions for Improvement: |
|--|------------------------------|

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|---|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | | | |
| | b. Students progressing to Higher Education | | | | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | | | | |
| | Comments: Not Applicable | | | | | |
| | Suggestions for Improvement: Not Applicable | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | | | | |
| | b. Awards and Medals for outstanding performance in Cultural | | | | | |
| | c. Participation in Inter-Institution Events at other Institutions | | | | | |
| | d. Professional Society/ Chapters and organizing engineering events | | | | | |

| | |
|--|---|
| | Comments: Not Applicable |
| | Suggestions for Improvement: Not Applicable |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | | | ✓ | |
| | b. Is there any proof available for students' feedback on facilities | | | | ✓ | |
| | c. Students involvement in Self Learning | | | | ✓ | |
| | d. Programmes/Initiatives for Career Guidance | | ✓ | | | |
| | e. Entrepreneurship Development | | ✓ | | | |
| | Comments: <ul style="list-style-type: none">No evidence is available for regular mentoring and entrepreneurship developmentStudents are encouraged to take up NPTEL exams/paper presentations in seminars | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">To conduct regular mentoring session 15 days onceMaintain attendance with Geo tagged photos and action taken reports | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | | | |
| | b. Publications from final year projects | | | | | |

| | | | | |
|--|--|--|--|--|
| c. Students undertaking field projects/internships | | | | |
| Comments: Not Applicable | | | | |
| Suggestions for Improvement: | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | | | |
| | c. Is there any proof for planning and management of the project available? | | | | | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | | | | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | | | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | | | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | | | | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | | | | |
| | Comments: Not Applicable | | | | | |

| | |
|--|------------------------------|
| | Suggestions for Improvement: |
|--|------------------------------|

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | | | | | |
| b. Are there any Industry linked laboratories available in the Department? | | | | | | |
| c. Is there evidence for effective utilization of industry linked laboratories? | | | | | | |
| d. Are there any courses partially/fully delivered by Industrial expert? | | | | | | |
| e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | | | | |
| f. Does the submitted proof is relevant and sufficient for the evaluation? | | | | | | |
| Comments: Not Applicable | | | | | | |
| Suggestions for Improvement: — | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| | a. Faculty Cadre Proportion | | | ✓ | | |
| | b. Faculty Qualification | | | ✓ | ✓ | |
| | c. Faculty Retention | | ✓ | | | |
| | d. Innovations by the Faculty in Teaching and Learning | | ✓ | | | |
| | e. Faculty participation in FDP/STTP | | | | ✓ | |

| | |
|--|--|
| | Comments: Faculties may be allowed to participate teaching pedagogies organized by training institutions of national repute |
| | Suggestions for Improvement: <ul style="list-style-type: none"> • Faculties may be encouraged to present research papers in national & international conferences • Faculties are encouraged to organize workshops/FDPs/STTP |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | | | ✓ | |
| | b. Undergone Online/ face to face FDPs | | | | ✓ | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | ✓ | | | |
| | Comments: Proposals to be submitted to the suitable government funding agencies | | | | | |
| | Suggestions for Improvement: Identification of the funding agency with novel research problem | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | ✓ | | | |
| | b. Recognized Research guides | | ✓ | | | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | ✓ | | | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | | | ✓ | |

| | |
|--|---|
| | Comments: Journal publication count to be improved |
| | Suggestions for Improvement: The department to be elevated to research department after qualifying for research supervisor status by all the Ph.D holders. |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | | | |
| | b. Industrial training for students and faculty members | | | | | |
| | c. Internships | | | | | |
| | d. Industrial projects | | | | | |
| | e. Industry supported labs | | | | | |
| | f. Industry visits by Students /Faculty members | | | | | |
| | g. Industrial expert speakers | | | | | |
| | h. Industrial courses | | | | | |
| | i. Consultancy | | | | | |
| | Comments: Not Applicable | | | | | |
| | Suggestions for Improvement: | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

1. Highly qualified teaching fraternity
2. Established laboratories to conduct experiments in B.E & B. Tech programmes
3. Excellent team work

B. Weaknesses:

1. Research facilities
2. Recognized research supervisors
3. Funding oppourtunities

C. Opportunities:

1. Seed money grant to initiate research activities
2. Infrastructural facilities
3. Allowed to visit well established research laboratories with On Duty

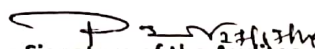
D. Challenges:

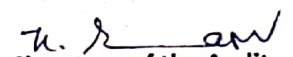
1. Students proficiency level and readiness for learning
2. Maintenance of slow learners of attendance
3. Teaching learning aids
4. Repetition of data entered manually in student log book and course files

E. Concluding remarks related to Academic Performance of the Department:

1. The department is progressing well with respect to teaching and learning process
2. Lagging in the part of research and development activities
3. It would be better to organize conferences and workshops at least twice in a year
4. Interaction with eminent scientist need to be enhanced.

| Details of the External Auditor: | |
|--|--|
| Name: Dr. K. Sadasivam | Faculty profile link: https://www.bitsathy.ac.in/departments/faculty/sadasivam- |
| Designation: Professor | Contact mail id:sadasivamk@bitsathy.ac.in |
| Department: Physics | Contact Number: 9443721521 |
| Institute: Bannari Amman Institute of Technology | |


 Signature of the Auditee
 (Dr. P. S. Sathesh Kumar)


 Signature of the Auditor
 Dr Sadasivam K M.Sc., M.Phil., Ph.D.
 Professor
 Department of Physics
 Bannari Amman Institute of Technology
 Sathyamangalam - 638 401.



NPR

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

NBA Accredited (B.E. - CSE, ECE, EEE & Mechanical Engg.) | Accredited by NAAC with 'A' Grade | Recognized by UGC under 2 (B)
ISO 9001:2015 Certified | Approved by All India Council for Technical Education, New Delhi | Affiliated to Anna University, Chennai



INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AND ADMINISTRATIVE AUDIT FOR THE ACADEMIC YEAR 2023 - 2024

Audit Report

Department: Management Studies

Date of Audit: 27.07.2024

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|--|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 1. | State the Vision, Mission of the Department and Institute and Programme Educational Objectives | NBA 1.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Does the Vision indicate the aspirations of the department? | | | Yes | | |
| | b. Does the Mission statements help to achieve the Vision of the department? | | | Yes | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|---------------------------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 2. | Indicate whether the Vision, Mission and PEOs are published and disseminated among the stakeholders. | NBA 1.3/1.4 NAAC 2.6.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Does the Vision, Mission and PEOs are available in Department, Institution's website & curriculum? | | | | Yes | | |
| b. Any effective process implementation in practice to ensure awareness about Vision, Mission and PEOs to internal and external stakeholders? | | | | Yes | | |
| Comments: <ul style="list-style-type: none">Nil | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-----------------------------|---|-----------|-------------|----------|-------------|------------------|
| A. Vision, Mission and PEOs | | | | | | |
| 3. | Establish consistency of PEOs with Mission of the Department | NBA 1.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mission Vs PEOs matrix exists for the Department. | | Yes | | | |
| | b. Is the matrix sufficient to establish the consistency of PEOs with Mission of the Departments? | | Yes | | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-------------------|-------------|----------|-------------|------------------|
| B. Curriculum Design and Development | | | | | | |
| 4. | Structure of the Curriculum, Planning, Implementation and Evaluation processes | NAAC 1.1.2, 1.1.3 | Not Evident | Emerging | Established | Highly Developed |
| a. Establishment of Curriculum Development Committee | | | | | Yes | |
| b. Any proof for reviewing and updating the content of the courses from time to time? | | | | | Yes | |
| c. Adherence to academic calendar | | | Yes | | | |
| d. Participation of faculty members related to curriculum development and assessment | | | Yes | | | |
| Comments: <ul style="list-style-type: none">College Academic Calendar and Department Calendar is same? | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------------------|--|-------------------|-------------|----------|-------------|------------------|
| C. Academic Flexibility | | | | | | |
| 5. | Curriculum provides additional choice of courses to meet the students' needs | NAAC 1.2.2, 1.2.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Learning options provided for meeting out the industrial requirements | | | Yes | | |
| | b. If so, whether majority of the students got benefitted? | | | Yes | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|--------------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 6. | Methodologies used for enhancing learning experiences | NBA 2.1.2, 2.2.1 NAAC 2.3.1 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for Experiential learning/Participative learning/Problem solving methodologies | | | | | Yes | |
| b. Delivery details of content beyond syllabus satisfies the industrial expectations | | | | Yes | | |
| c. Does the submitted proof is relevant and sufficient for the evaluation | | | Yes | | | |
| Comments: <ul style="list-style-type: none">More number (10% of Students) are absent for Industrial visitDeviation in Plan and Execution | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|-------------------------|-------------|----------|-------------|------------------|
| D. Teaching Learning Process | | | | | | |
| 7. | ICT for effective teaching with Learning Management Systems (LMS), E-Learning resources, etc. | NBA 2.2.1 NAAC 2.3.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof for teachers using ICT facilities in the department for effective teaching? | | | Yes | | |
| | b. Is there proof for faculty members using LMS for the conduction of classes? | | | Yes | | |
| | c. Is there proof for faculty members using E-Learning resources for effective teaching? | | | Yes | | |
| | d. Does the submitted proof is relevant and sufficient for the evaluation? | | | Yes | | |
| Comments: <ul style="list-style-type: none">Nil | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-----------|-------------|----------|-------------|------------------|
| E. Teaching Learning and Evaluation | | | | | | |
| 8. | Quality of end semester examination, periodical test question papers, assignments, and evaluation | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Number of End Semester Examination Question Papers Analyzed (Min.50%) | | | | Yes | |
| | b. Number of Periodical Examination Question Papers Analyzed (Min.50%) | | | | Yes | |
| | c. Number of Course Files verified (at least one sample for each year is required) | | | | Yes | |
| | Comments: | | | | | |
| | <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: | | | | | |
| <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------|---|-----------|-------------|----------|-------------|------------------|
| F. Assessment | | | | | | |
| 9. | Quality of Assessment | NBA 2.2.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the Standard, Appropriateness and Challenge of Examination Question Papers Satisfactory? | | | Yes | | |
| | b. Is there a Clear and Transparent Marking Criteria available for all the Courses? | | | Yes | | |
| | c. Does the distribution of marks between End Semester Examination and Continuous Evaluation are well balanced? | | | Yes | | |
| | d. Is there a well-established Regulation exist for the students to get clarity about the Assessment, Credit Scheme, Moderation, Condonement and Marking | | Yes | | | |
| | Comments: <ul style="list-style-type: none">Subject faculty, Question setter and evaluator – Check the integrityMore failures in Statistics for management | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">High Transparency is required 9.d | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|-------------|--|-------------------------|-------------|----------|-------------|------------------|
| G. Feedback | | | | | | |
| 10. | Student feedback on Teaching Learning process | NBA 2.2.1 NAAC 2.7.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there any proof available for students' feedback on Teaching Learning process? | | | | Yes | |
| | b. Is the action planned based on the feedback? | | | Yes | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | | Yes | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 11. | Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) | NBA 3.1 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course Articulation Matrix Exists for the Department? | | Yes | | | |
| | b. Program Articulation Matrix Exists for the Department? | | Yes | | | |
| | c. Are the matrices sufficient to establish correlation between the courses and POs & PSOs? | | Yes | | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|---------------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 12. | Describe the assessment tools and process used to gather the data upon which the evaluation of COs, each POs and PSOs is based. | NBA 3.2/3.3 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Are the Assessment tools, question and rubrics used to measure students' learning and course outcomes are clear, sufficient and exemplified? | | | | Yes | | |
| b. Are the Assessment tools, process for POs and PSOs are clear, sufficient and exemplified? | | | Yes | | | |
| c. Is the process of Data collection, analysis and presentation for COs attainment sufficient and exemplified? | | | Yes | | | |
| Comments: <ul style="list-style-type: none">Nil | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------------------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 13. | Record the attainment of Course Outcomes of courses with respect to set attainment levels. | NBA 3.2 NAAC 2.6.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Are Course Outcome targets set and well established for the courses with proper justification? | | Yes | | | |
| | b. Are the attainment level of the Course Outcomes submitted are satisfactory for all the courses? | | Yes | | | |
| | c. Are the action plan satisfactory for courses with COs not attained? | | Yes | | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Attainment of Bloom's Taxonomy is recommended for Internal tests | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|---|-----------|-------------|----------|-------------|------------------|
| H. Attainment of POs, COs & PSOs | | | | | | |
| 14. | Provide results for evaluation of each PO & PSO | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Course – POs & PSOs Matrix available for Direct Attainment? | | Yes | | | |
| | b. Course – POs & PSOs Matrix available for Indirect Attainment? | | Yes | | | |
| | c. Does the submitted proof is relevant and sufficient for the evaluation? | | Yes | | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">CO, PO Attainment is not evident for CIA, End Semester Examination | | | | | |
| | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|-----------|-------------|----------|-------------|------------------|
| I. Self-Evaluation and Reflection | | | | | | |
| 15. | Action Taken based on the results of evaluation of each of the COs, POs and PSOs | NBA 3.3 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any analysis of weakness in the program based on the analysis of evaluation of COs, POs & PSOs attainment level available? | | | Yes | | | |
| b. Are there any measures identified and implemented to improve POs & PSOs attainment level through curriculum intervention and pedagogical initiatives? | | | Yes | | | |
| c. Does the submitted proof is relevant and sufficient for the evaluation? | | | Yes | | | |
| Comments: <ul style="list-style-type: none">No Exercises for Slow learners | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|---|-------------------------------------|-------------|----------|-------------|------------------|
| J. Students Progression | | | | | | |
| 16. | Placement/Higher Education/ State/ National/International level examinations | NAAC 5.2.1, 5.2.2, 5.2.3 NBA 4.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Placement of outgoing students | | | Yes | | |
| | b. Students progressing to Higher Education | | Yes | | | |
| | c. Students Qualifying in GATE/CAT/TOEFL/Civil Services/State Government exam | | Yes | | | |
| | Comments: | | | | | |
| | <ul style="list-style-type: none">Applicable for Next academic year | | | | | |
| Suggestions for Improvement: | | | | | | |
| <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|---------------------------------------|-------------|----------|-------------|------------------|
| K. Student Participation and Activities | | | | | | |
| 17. | Co-curricular and Extra-curricular activities | NAAC 5.3.1, 5.3.3 NBA 4.6.1, 4.6.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Awards and Medals for outstanding performance in Sports | | | Yes | | |
| | b. Awards and Medals for outstanding performance in Cultural | | | Yes | | |
| | c. Participation in Inter-Institution Events at other Institutions | | | Yes | | |
| | d. Professional Society/ Chapters and organizing engineering events | | Yes | | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------|--|-----------------------------|-------------|----------|-------------|------------------|
| L. Student Support Systems | | | | | | |
| 18. | Services and resources provided to students to enhance their overall well-being. | NBA 9.1, 9.3, 9.4, 9.5, 9.6 | Not Evident | Emerging | Established | Highly Developed |
| | a. Mentoring system helps students at individual level | | | Yes | | |
| | b. Is there any proof available for students' feedback on facilities | | | | Yes | |
| | c. Students involvement in Self Learning | | | | Yes | |
| | d. Programmes/Initiatives for Career Guidance | | | | Yes | |
| | e. Entrepreneurship Development | | | | Yes | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 19. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is the list of students' final year projects and individual project mapped with POs and PSOs checked? | | | | Yes | |
| | b. Publications from final year projects | | | | Yes | |
| | c. Students undertaking field projects/internships | | | | Yes | |
| | Comments: <ul style="list-style-type: none">Prizes and Certificate recommended for best projects and Internships | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|---|----------------|-------------|----------|-------------|------------------|
| M. Student Projects | | | | | | |
| 20. | Quality of the students' Projects | NBA 2.2.3, 6.4 | Not Evident | Emerging | Established | Highly Developed |
| | a. Is there a clear guidance exist for the final year project selection and allocation? | | | Yes | | |
| | b. Is there any evidence for the supervision of faculty during the progression of the project available? | | | | Yes | |
| | c. Is there any proof for planning and management of the project available? | | | | Yes | |
| | d. Do the projects carried out are as per the standards and appropriate in satisfying the Learning Outcomes? | | | | Yes | |
| | e. Does each student in the group project have a clearly specified aim and objective for his or her part of the project and Individual contribution detailed in the project report? | | | Yes | | |
| | f. Does the Project Assessment contain a series of assessment stages to assess the performance and contribution of each student? | | | | Yes | |
| | g. Is there a differentiated marking scheme observable for individual students in a group project? | | Yes | | | |
| | h. Are the projects effectively contributing to the achievements of Learning Outcomes in the areas of Design, Economic, Legal, Social, Ethical and Environmental context, and engineering practice? | | Yes | | | |
| | Comments: <ul style="list-style-type: none">ESG, NGO Projects are recommended | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--|--|--------------------------------|-------------|----------|-------------|------------------|
| N. Industry Connect | | | | | | |
| 21. | Initiatives related to industry interaction, industry internship/summer training | NBA 2.2.4 NAAC 3.5.1, 3.5.2 | Not Evident | Emerging | Established | Highly Developed |
| a. Is there any proof for industry related initiatives, implementation details and impact analysis available for the Department? | | | | Yes | | |
| b. Are there any Industry linked laboratories available in the Department? | | | Yes | | | |
| c. Is there evidence for effective utilization of industry linked laboratories? | | | Yes | | | |
| d. Are there any courses partially/fully delivered by Industrial expert? | | | Yes | | | |
| e. Percentage of students undergoing Industry Internship/summer training in the Department is up to the mark? | | | | Yes | | |
| f. Does the submitted proof is relevant and sufficient for the evaluation? | | | | | Yes | |
| Comments: <ul style="list-style-type: none">Nil | | | | | | |
| Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---|--|--|-------------|----------|-------------|------------------|
| O. Faculty Information and Contribution | | | | | | |
| 22. | Faculty qualification and experience/Contribution to the improvement of student learning/Training programmes | NBA 5.2 to 5.6, 5.7.1 to 5.7.4, 5.8, 5.9 | Not Evident | Emerging | Established | Highly Developed |
| | a. Faculty Cadre Proportion | | | Yes | | |
| | b. Faculty Qualification | | | Yes | | |
| | c. Faculty Retention | | | Yes | | |
| | d. Innovations by the Faculty in Teaching and Learning | | | Yes | | |
| | e. Faculty participation in FDP/STTP | | | Yes | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|----------------------------------|--|--------------------------|-------------|----------|-------------|------------------|
| O. Faculty Enrollment Strategies | | | | | | |
| 23. | Faculty Empowerment Strategies | NAAC 6.3.3, 6.3.4, 6.4.2 | Not Evident | Emerging | Established | Highly Developed |
| | a. Professional Development/ Administrative training programs organized by the institution | | | Yes | | |
| | b. Undergone Online/ face to face FDPs | | | Yes | | |
| | c. Funds/ Grants received from NGOs/Individuals/Philanthropers | | | Yes | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|--------------------------|--|--|-------------|----------|-------------|------------------|
| O. Research & Innovation | | | | | | |
| 24. | Research Mobilization & Innovation Ecosystem | NAAC 3.1.1, 3.1.2, 3.1.3, 3.2.2, 3.3.3 | Not Evident | Emerging | Established | Highly Developed |
| | a. Grants received from Govt/ NGO agencies for research project | | Yes | | | |
| | b. Recognized Research guides | | | Yes | | |
| | c. Workshop/Seminar conducted on research methodology, IPR and Entrepreneurship | | | Yes | | |
| | d. Books and chapters in edited volumes/books published and paper published in National/International conference proceedings | | | Yes | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

| S/N | Criteria | Relevance | Evaluation | | | |
|---------------------|--|------------------|-------------|----------|-------------|------------------|
| P. Industry Connect | | | | | | |
| 25. | Initiatives related to industry- interactions | NBA 2.2.4, 2.2.5 | Not Evident | Emerging | Established | Highly Developed |
| | a. Industry involvement in curriculum design and impact analysis | | | Yes | | |
| | b. Industrial training for students and faculty members | | | Yes | | |
| | c. Internships | | | Yes | | |
| | d. Industrial projects | | | Yes | | |
| | e. Industry supported labs | | Yes | | | |
| | f. Industry visits by Students /Faculty members | | | Yes | | |
| | g. Industrial expert speakers | | | Yes | | |
| | h. Industrial courses | | | Yes | | |
| | i. Consultancy | | | Yes | | |
| | Comments: <ul style="list-style-type: none">Nil | | | | | |
| | Suggestions for Improvement: <ul style="list-style-type: none">Nil | | | | | |

Please provide the following details, relevant to the Department in the space provided below:

A. Strengths:

- More focused on Academics and Systematic in Procedure
- Well balanced Syllabus

B. Weaknesses:

- More Industrial inputs are required
- ESG, NGO, Social connect is missing
- Transparency required for 9.d

C. Opportunities:

- Localized industries can be added Ex: Coir, Food, Coconut

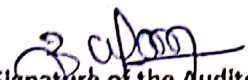
D. Challenges:

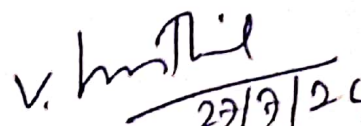
- 50% is the faculty retention

E. Concluding remarks related to Academic Performance of the Department:

- Nil

| Details of the External Auditor: | |
|--|---|
| Name: Dr.V.Senthil | Faculty profile link: https://tsm.ac.in/faculty/dr-senthil-v/ |
| Designation: Associate Professor | Contact mail id: senthil@tsm.ac.in |
| Department: Information Technology | Contact Number: +91-9894505082 |
| Institute: Thiagarajar School of Management, Thirupparankundram, Madurai | |


Signature of the Auditee
(Dr. B. rehmungon)
HOD/MBA


Signature of the Auditor
(V. SENTHIL)



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COURSE FILE-CONTENT

1. PREFACE OF THE SUBJECT
2. INSTITUTE V/M, DEPARTMENT V/M, PSO, PEO & PO STATEMENTS
3. COURSE INFORMATION SHEET
4. TIME TABLE WITH INDIVIDUAL WORK LOAD
5. TENTATIVE LESSON PLAN
6. LESSON PLAN AND EXECUTION. (IF ANY DEVIATION MAKEUP CLASS)
7. LECTURE NOTES
8. OHP/PPT/SUBJECT CDS
9. TOPIC BEYOND SYLLABUS WITH REFERENCE DETAILS.
10. GAP IN SYLLABUS – PLAN AND EXECUTION.
11. UNIVERSITY QUESTION PAPERS WITH ANSWER KEY.
12. INTERNAL QUESTION PAPER WITH ANSWER KEY.
13. ASSIGNMENT TOPICS WITH SUBMISSION DATES.
14. INTERNAL ASSESMENT MARK RECORDS
15. STUDENTS NAME LIST-COMMON AND CATEGORYWISE
16. REMEDIAL CLASS PLAN AND CONTINUOUS EVALUATION RECORDS.
17. COURSE HAND OUT
18. DELIVERY MONITORING.
19. COURSE ASSESMENT SHEET
20. SAMPLE ASSIGNMENTS.
21. TUTORIAL SHEETS
22. SAMPLE ANSWER SHEETS.

STAFF IN-CHARGE

[R. Joan Parithora]

HOD-CSE

[Dr. M. Indradevi]

PRINCIPAL



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PREFACE

NAME OF THE FACULTY : R. Joan Panithra.

DESIGNATION : ASSISTANT PROFESSOR

NAME OF THE SUBJECT : Python Programming.

SUBJECT CODE : 23CS201

YEAR : I

SEMESTER : II

ACADEMIC YEAR : 2023-2024 (EVEN)

REGULATION : 2023

PREPARED BY

(R. Joan Panithra)

APPROVED BY

(M. Indra Devi)



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC AUDIT REPORT

| Year/sem | III/5 | INTERNAL TEST-1 | | | | | | INTERNAL TEST-2 | | | | | | MODEL TEST-1 | | | | | |
|------------------------------------|------------------------|----------------------------|--------------------------|-----------------|-----------------|-------|--------------|----------------------------|--------------------------|-----------------|-----------------|-------|----------------------------|--------------------------|-----------------|-----------------|-------|--|--|
| Subject code | Name of the faculty | No. Of students registered | No. of students attended | No. of absences | No. Of failures | Pass% | | No. Of students registered | No. of students attended | No. of absences | No. Of failures | Pass% | No. Of students registered | No. of students attended | No. of absences | No. Of failures | Pass% | | |
| 23CS201 | Phython Programming | 63 | 63 | - | 4 | 93% | IA test | 63 | 63 | - | 5 | 92% | 63 | 61 | 2 | 4 | 96% | | |
| | | - | - | - | - | - | Make up test | - | - | - | - | - | 2 | 2 | - | - | 100% | | |
| | | Improve pass percentage. | | | | | | Improve pass percentage | | | | | | Avoid absence. | | | | | |
| SIGNATURE OF IQAC MEMBER WITH NAME | | M. K 2 - H. KALARANI | | | | | | M. K 2 - H. KALARANI | | | | | | M. K 2 - H. KALARANI | | | | | |
| SIGNATURE OF HOD | | M. K 2 - H. KALARANI | | | | | | M. K 2 - H. KALARANI | | | | | | M. K 2 - H. KALARANI | | | | | |
| PRINCIPAL | | M. K 2 - H. KALARANI | | | | | | M. K 2 - H. KALARANI | | | | | | M. K 2 - H. KALARANI | | | | | |



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

FACULTY REPORT FOR CORRECTIVE ACTION (STUDENTS FEEDBACK)

| NAME: R. JOAN PAVITHRA. | | | | | | | | | | |
|---|---|---|---|---|--------------------------------|--|---|--|---------------------------------------|-------|
| SUBJECT CODE/SUBJECT TITLE: 23CS201 - Python Programming. | | | | | | | | | | |
| ACADEMIC YEAR/SEM: 2023-24 02. | | | | | | | | | | |
| 1. Does The teacher come prepared on lessons? | 2. Subject knowledge And clarity of the faculty | 3. Impartiality & fairness to students? | 4. Interaction with students by the faculty | 5. Valuable extra information given during the lectures by the faculty? | 6. Enthusiasm for the subject? | 7. Showing concern & for the students? | 8. Punctuality in evaluation of exam papers/ Assignments? | 9. Whether syllabus for is tests/ University examination completed steadily? | 10. Ability to speak loudly & clearly | TOTAL |
| 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |
| 10 | 10 | 10 | 10 | 9 | 10 | 10 | 10 | 10 | 10 | 99 |
| CORRECTIVE ACTION: | | | | | | | | | | |
| → students need Powerpoint presentation for the subjects to better understand the flow of topics. | | | | | | | | | | |
| REMARKS BY HOD: | | | | | | | | | | |
| → powerpoint presentation prepared for all the 5 units and shared to the students. | | | | | | | | | | |

IQAC Audit Member 1
 M. S. JITHA

IQAC Audit Member 2
 (M. Kalarani)



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

FACULTY FEEDBACK REPORT DURING OCTOBER 2023-2024- EVEN

| S.NO | CONTENT | MARKS(10) |
|------|--|-----------|
| 1. | STAFF NAME <u>R. Joan Pavithra</u> | |
| 2. | BRANCH/SEM <u>CSE / 02</u> | |
| 3. | TOTAL NO. OF STUDENTS <u>63</u> | |
| 4. | SUBJECT CODE/TITLE <u>23CS201 - Python Programming</u> | |
| 5. | DOES THE TEACHER COME PREPARED ON LESSONS? | 10 |
| 6. | SUBJECT KNOWLEDGE AND CLARITY OF THE FACULTY | 10 |
| 7. | IMPARTIALITY & FAIRNESS TO STUDENTS? | 10 |
| 8. | INTERACTION WITH STUDENTS BY THE FACULTY | 10 |
| 9. | VALUABLE EXTRA INFORMATION GIVEN DURING THE LECTURES BY THE FACULTY? | 09 |
| 10. | ENTHUSIASM FOR SUBJECT | 10 |
| 11. | SHOWING CONCERN & FOR THE STUDENTS? | 10 |
| 12. | PUNCTUALITY IN EVALUATION OF EXAM PAPERS/ ASSIGNMENTS? | 10 |
| 13. | WHEATHER SYLLABUS FOR IA TESTS/UNIVERSITY EXAMINATION COMPLETED STEADILY | 10 |
| 14. | ABILITY TO SPEAK LOUDLY & CLEARLY | 10 |
| | TOTAL | 99 |

HOD-CSE

PRINCIPAL

IQAC Audit Member1

V. SUGITHA

IQAC Audit Member2

M. Kalarani.



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COURSE FILE-CONTENTS

| S.NO | CONTENTS | REVIEW 1 | REVIEW 2 | REVIEW 3 |
|----------------------------------|---|-------------|-------------|-------------|
| 1 | PREFACE OF THE SUBJECT-1 | Yes | Yes | Yes |
| 2 | INSTITUTE V/M, DEPARTMENT V/M, PSO, PEO & PO STATEMENTS-1 | Yes | Yes | Yes |
| 3 | COURSE INFORMATION SHEET-1 | Yes | Yes | Yes |
| 4 | TIME TABLE WITH INDIVIDUAL WORK LOAD-1 | Yes | Yes | Yes |
| 5 | TENTATIVE LESSON PLAN-1 | Yes | Yes | Yes |
| 6 | LESSON PLAN AND EXECUTION.(IF ANY DEVIATION MAKEUP CLASS)-3 | Yes | Yes | Yes |
| 7 | LECTURE NOTES-1 | Yes | Yes | Yes |
| 8 | OHP/PPT/SUBJECT CDS-1 | Yes | Yes | Yes |
| 9 | TOPIC BEYOND SYLLABUS WITH REFERENCE DETAILS.-1 | Yes | Yes | Yes |
| 10 | GAP IN SYLLABUS – PLAN AND EXECUTION.-1 | Yes | Yes | Yes |
| 11 | UNIVERSITY QUESTION PAPERS WITH ANSWER KEY.-1 | Yes | - | Yes |
| 12 | INTERNAL QUESTION PAPER WITH ANSWER KEY.-3 | Yes | Yes | Yes |
| 13 | ASSIGNMENT TOPICS WITH SUBMISSION DATES.-3 | Yes | Yes | Yes |
| 14 | INTERNAL ASSESMENT MARK RECORDS-3 | Yes | Yes | Yes |
| 15 | STUDENTS NAME LIST-COMMON AND CATEGORYWISE-3 | Yes | Yes | Yes |
| 16 | REMEDIAL CLASS PLAN AND CONTINUOUS EVALUATION RECORDS.-3 | Yes | Yes | Yes |
| 17 | COURSE HAND OUT-1 | Yes | Yes | Yes |
| 18 | DELIVERY MONITORING.-3 | Yes | Yes | Yes |
| 19 | COURSE ASSESMENT SHEET-3 | Yes | Yes | Yes |
| 20 | SAMPLE ASSIGNMENTS.-3 | Yes | Yes | Yes |
| 21 | TUTORIAL SHEETS-3 | Yes | Yes | Yes |
| 22 | SAMPLE ANSWER SHEETS.-3 | Yes | Yes | Yes |
| SIGNATURE OF THE STAFF IN CHARGE | | | | |
| SIGNATURE OF THE HOD | | | | |



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Statement for Syllabus Completion

I have handled the subject 23CS201 - Python Programming for 02/01 Sem/ year,
B.E-Department of Computer Science and Engineering during the Academic year 2023-2024,
Even Semester.

In this regard, I confirm that have taught all the topics mentioned in the syllabus, and
took lectures for 18 Periods and discussed the Anna University question papers of the last 5
years.

Signature :


Name : R. Joan Panithra

Designation : Assistant Professor.

Department : Computer Science Engineering.

Date : 13.06.2024.

Signature of the HoD : 

Signature of the Principal : 


IQAC Audit Member1

V. S. JITHA


IQAC Audit Member2

M. KALARANI, AP/CSE



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MAE'S INNOVATION CELL
(GOVERNMENT OF PUNJAB)



INTERNAL TEST - I / II

April-May / Nov-Dec - 20__

Register Number : 58322104025
Department : CSE Semester / Year : II / I
Course code & Title : 23CS201 - Python Programming
Date & Session (FN/AN) : 02/04/24 & FN. Number of pages used : 14

M. Santharabalan

- Name of the Hall Superintendent

M. Santharabalan
24/4/24

Signature of the Hall Superintendent
with Date

| PART-A | | | |
|--------------|---|------------------|------------------|
| Question No. | ✓ | CO...1. Marks | CO...2. Marks |
| 1. | ✓ | 2 | |
| 2. | ✓ | 2 | |
| 3. | ✓ | 2 | |
| 4. | ✓ | | 2 |
| 5. | ✓ | | 2 |
| 6. | ✓ | | 2 |
| TOTAL | | 6 | 6 |
| TOTAL MARKS | | 12 | |

| PART-B & C | | | | | | | |
|--------------|----|------------------|----|------------------|-----|------------------|-------------|
| Question No. | I | | II | | III | | Total Marks |
| | ✓ | CO...1. Marks | ✓ | CO...2. Marks | ✓ | CO...3. Marks | |
| 7. | a) | ✓ 15 | | | | | 15 |
| | b) | | | | | | |
| 8. | a) | ✓ 7 | | ✓ 8 | | | 15 |
| | b) | | | | | | |
| 9. | a) | | | | | | |
| | b) | ✓ | 13 | | | | 13 |
| TOTAL | | 22 | 13 | | 8 | | 43 |

*Student has to put a tick (✓) mark for the questions attended in tick mark column

| CO. No. | Total Marks | Attained Marks |
|----------|-------------|----------------|
| CO...1.. | 30 | 28 |
| CO...2.. | 30 | 27 |

| | |
|-------------|----|
| Grand Total | 55 |
| | 60 |

P. Joan Parithra
Name of the Examiner

P. Joan Parithra
Signature of the Examiner with Date