

Date: 25.03.2022

Internal
Academic and Administrative Audit
For
Semester- I, AY: 2021-2022

Academic and Administrative Audit report for the academic year 2021-22, semester I have the following sections.

Section-1:	Audit Team and Academic Details
Section-2:	Aspects/Activities, Observations, Remarks/Suggestions.
Section-3:	Overall Observations and Recommendations

Section-1: Audit Team and Academic Details

Name of the Department		Electrical and Electronics Engineering		
Date of Audit		22.03.2022		
Academic year		2021-22	Semester	I
Audit Team				
Sl.No	Name	Designation	Department	
1.	Dr AVS Prasad	Professor	CE	
2.	Dr J Srinivasulu	Professor	ECE	
3.	Mrs N Santhi Kumari	Assistant Professor	EEE	
4.	Dr P Penchalaiah	IQAC Coordinator	IQAC	

Name of the Head of the Department		Dr. G VENKATESWARLU				
Mail ID	<i>hodeee@necn.ac.in</i>	Mobile No		7780555391		
Sl. No	Program offered	Strength				
		I	II	III	IV	Total
1	B.Tech I SEM	66	66	108	115	355

Section-2: Aspects, Observations, Remarks/Suggestions

ACADEMIC AUDIT	
Sl. No	Aspects/Activities – Observations – Remarks/Suggestions
1	Academic Calendar- Implementation
	<p>Observations: The department has been adhering to JNTUA schedules by creating its own academic event calendar for each semester.</p> <p>Remarks/suggestions: Classes were conducted smoothly and activities were carried out with some deviation from the academic calendar.</p>
2	Syllabus coverage
	<p>Observations: It was observed that syllabus coverage was verified based on syllabus completion targets in every fort night. Few subjects were deviated and completed by taking extra classes.</p> <p>Remarks/suggestions: Suggested to complete the syllabus as per syllabus completion targets.</p>
3	Moodle Upload
	<p>Observations: College Learning Management System (LMS) was extensively used by both faculty & students for course materials, PPTs, E-Resources & question banks of assignments and Mid-term examinations. Though some of the faculty were not uploaded the data in Moodle on or before the given date.</p> <p>Remarks/suggestions: Advised to upload the course contents in Moodle before the starting of the semester.</p>
4	Course files
	<p>Observations: For each individual course under the relevant regulations, the department maintains course files. Though Some of the course files didn't have all the contents to be filed.</p> <p>Remarks/suggestions: Some of the course files were incomplete and lacked some necessary information.</p>
5	Mapping of COs and POs/PSOs
	<p>Observations: R-21 Regulations COs were defined and CO-PO & PSOs mapping was done and filed properly.</p> <p>Remarks/suggestions: OBE coordinator was suggested to verify the action verb & learning statement of all COs of all courses.</p>
6	CO Attainment & PO Attainment
	<p>Observations: 1. CO Attainments of 2020-21 I semester was done and not attained COs were listed.</p>

	<p>2. PO Attainment for 2017-21 batch was done and the relevant documents were filed properly.</p> <p>Remarks/suggestions: Suggested to list the action taken for not attained POs.</p>
7	ICT usage
	<p>Observations: The department practicing the blended teaching learning methods like ICT usage, assignments for students etc for effective lecture delivery and to make student engaged.</p> <p>Remarks/suggestions: Appreciated the department for improvement in ICT usage compared to last semester.</p>
8	Quality of Question Papers
	<p>Observations: All Midterm and Assignment question papers are preparing as per OBE standards.</p> <p>Remarks/suggestions: Appreciated for the quality of question paper.</p>
9	Evaluation of Answer Scripts
	<p>Observations: All midterm and assignment answer scripts were evaluated, and after circulating among the students, marks were posted.</p> <p>Remarks/suggestions: Appreciated the department for submitting the marks for examination section with in specified time.</p>
10	Slow and Advanced Learners
	<p>Observations: 1. The slow and advanced learners list given by the examination section was filed. 2. The activities for slow learners were conducted by the department and relevant documents were filed properly. 3. The activities for advanced learners were conducted by the department and relevant documents were filed properly.</p> <p>Remarks/suggestions: Advised to conduct the programmes as per the schedule given in Academic calendar.</p>
11	Remedial Classes
	<p>Observations: The following remedial classes were conducted for this semester.</p> <ol style="list-style-type: none"> 1. HVDC & FACTS for III-I 2. CONTROL SYSTEMS for III-I 3. AC MACHINES for III-I 4. DSP for IV-I 5. FACTS for IV-I 6. PSOC for IV-I 7. DCMT for II-I

	<p>8.ECS for II-I 9. EDC for II-I Remarks/suggestions: All the documents are filed properly.</p>
12	Remedial Coaching
	<p>Observations: Remedial coaching was conducted for the following subjects: 1. " Problem Solving & Programming" for II EEE 8 students from 20.12.2021 to 22.12.2021. 2. " Algebra & Calculus" for II EEE students (9) from 23.12.2021 to 27.12.2021. 3. " Applied Physics" for II EEE students (25) from 28.12.2021 to 30.12.2021. . Remarks/suggestions: All the related documents are maintaining properly.</p>
13	Guest Lectures
	<p>Observations: Organized one guest lecture on 1. "Machine Learning Applications in Electrical Engineering" by Sk. Masumsattar, Data Scientist, HP Bangalore, on 21-03-2021. Remarks/suggestions: Advised to conduct more guest lectures by eminent speakers.</p>
14	Lecture Schedule Verification
	<p>Observations: It is observed that few courses were deviated from the pre scheduled lesson plan. Remarks/suggestions: Extra classes for deviations have been taken in order to comply to the session plan.</p>
15	Lab Records/Manuals
	<p>Observations: It was observed that all the faculty dealt the labs have done continuous evaluation of records and manuals. Remarks/suggestions: Soft and hard copies of all lab manuals and sample records of each laboratory for each semester are maintaining in the department for future reference.</p>
16	Continuous Evaluation For Practical Courses
	<p>Observations: Continuous evaluation of practical courses was done during semester. Remarks/suggestions: The continuous evaluation books were updated regularly.</p>
17	Students Project Evaluation and Review
	<p>Observations: Not applicable for this semester. Remarks/suggestions: -----</p>
18	Internships

	<p>Observations: No internships were done by the students for this semester.</p> <p>Remarks/suggestions: -----</p>
19	Partial Delivery by Industrial Experts
	<p>Observations: There was two partial deliveries by industry experts</p> <ol style="list-style-type: none"> 1. Power Quality for IV B.Tech/ I Sem students by Mr. S. Jagannathan, Executive Engineer, Ennore Thermal Power Plant, Chennai. 2. Electrical Machines III for III B.Tech/ I Sem students by Mr. P. Ravindra, Deputy Manager, Bio-Gas Power Plant, Gudiyatham, Tamil Nadu. <p>Remarks/suggestions: All the relevant documents were filed properly. Suggested to organize partial delivery by industrial experts for II EEE students also.</p>
20	Adjunct Faculty
	<p>Observations: Mr. P.V. Ramanaiah, Retired DE, Transformer Division, APSPDCL, Nellore, has completed 18 hours of IV EEE Energy Audit and Demand Side Management coursework.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
21	Topic/Content Beyond Syllabus
	<p>Observations:</p> <ol style="list-style-type: none"> 1. Topics beyond syllabus for all courses of the semester were listed and the materials were filed. 2. The relevant documents for events organized for content beyond syllabus (Not mapped COs) were filed properly. <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
22	Newsletter/Technical Magazine/Wall Papers etc.
	<p>Observations:</p> <ol style="list-style-type: none"> 1. All departmental events were published in the departmental newsletters for the first semester of the academic year 2021-22. 2. The department's Technical Magazine for I semester of 2021-22 has been published. <p>Remarks/suggestions: Newsletter and technical magazines are maintaining in department library also.</p>
23	Student Feedback on TLP
	<p>Observations: Student feedback on teaching learning process was conducted in modes 1. Online 2. Offline. Analysis report was filed properly.</p> <p>Remarks/suggestions: Action taken report has to be filed.</p>
24	Feedback on Curriculum

	<p>Observations: It was observed that feedback on curriculum was collected from stake holders i.e., students, faculty, employers & alumni and submitted the same to IQAC for the analysis.</p> <p>Remarks/suggestions: Work done is appreciable.</p>
25	Value added courses / Certificate Courses
	<p>Observations: Conducted one Value Added Courses on</p> <p>i) "A Simplistic Printed Circuit Board Layout Design With Proteus" by Pantech e-Learning Solutions, Chennai from 02.02.2022 to 06.02.2022.</p> <p>Remarks/suggestions: Suggested to conduct more certificate and value added courses for the students.</p>
26	Industrial Visits
	<p>Observations: One industrial visit was organized for III EEE students to "Vijayawada Thermal Power Station" on 6th March 2022.</p> <p>Remarks/suggestions: Advised to organize more industrial visits for all class students.</p>
27	MOUs
	<p>Observations: Two activities were conducted under 2 MoU's.</p> <ol style="list-style-type: none"> 1. Two days workshop on "IOT & Embedded System Hands on Approach" by Pantech eLearning Pvt Ltd., II Floor , Kotta Srinivasiah street, Near Duraisamy subway, T.Nagar, Chennai from 08.11.2021 to 09.11.2021. 2. Technical Talk on Artificial Intelligence on Power Sector by Weber India Infra Power (opc) Pvt Limited, for Energy Efficient power solutions, Venkatachalam, Nellore on 30.11.2021. <p>Remarks/suggestions: Advised to conduct workshops/ seminars to the students under each MoU in the coming semester.</p>
28	Professional society activities
	<p>Observations: Four(4) Programs were organized under professional society activities</p> <ol style="list-style-type: none"> 1. A Seminar on Development Challenges for Embedded controller Applications by Mr. A.Avinash, Team Leader, Verzeo Bangalore (IEEE) on 09-02-2022. 2. A seminar on "Computational aspects of VLSI Design with an Emphasis on Semiconductor Device Simulation" by Mr.P.Purna, Team Leader, Verzeo, Bangalore(ISTE) on 09-02-2022. 3. Technical Talk on "Artificial Intelligence on Power Sector" by N. Senthil Kumar, Electrical Engineer, Weber India Infra Power (opc) Pvt Limited, for Energy Efficient power solutions, Venkatachalem, Nellore (ISTE) on 30-11-2021. 4. "Technical Talk on Introduction to Basic Concepts in PCB Design" Mr. K.Kalyan,

	<p>Senior Project Engineer, Prolific Systems and Technology Pvt Ltd, An AI Tanmiya Group (Kuwait) Company, Hyderabad (IEEE) on 12-03-2022.</p> <p>Remarks/suggestions: Appreciated the department for conducting good number of activities by professional society bodies.</p>
29	Industry Institute Interaction Cell Activities
	<p>Observations: The following programmes were conducted by IIIC:</p> <ol style="list-style-type: none"> 1. A two days work shop on IOT and embedded system hands on approach by 1. Mr.Nivin Sr.Project Eginer Pantech elearning Pvt.Ltd 2.Mr.Veda Praneeth Sr.Project Engineer Pantech elearning Pvt.Ltd from 08-11-2021 to 09.11.2021. 2. A Technical talk on Introduction to Basic concepts in PCB design by Mr.K.Kalyan Sr.Project Engineer Prolific systems&Technologies Pvt.Ltd, Hyderabad. on 03-12-2021 3. Value added course on "smart micro grid protection and relay testing" by Mr.SK. Amenuddin, Field operation Manager, ETCAM Institute if EEE Engineers, TCCGES Pvt.Ltd. Nellore on 23.11.2021 to 27.11.2021. 4. A Technical talk on "An Overview of Artificial Intelligence Techniques in Power system and motor drive" by Mr.A. Praveen Kumar, Techlead-TCS, Bengaluru on 23.03.2022. <p>Remarks/suggestions: Appreciated for conducting good number of programmes under IIIC.</p>
30	Student Association Activities
	<p>Observations: Fourteen (14) activities were organized by the department under student association.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
31	Student External Participation
	<p>Observations: No student was participated in events of other institutions.</p> <p>Remarks/suggestions: Advised to encourage the students to participate in other institutions.</p>
32	Workshops/Seminars/Conferences/NLTS Etc., Conducted
	<p>Observations: One National Level Technical Symposium was organized by the department.</p> <p>Remarks/suggestions: All relevant documents were filed.</p>
33	Placement Training (Internal & External)
	<p>Observations: The department and placement cell organized training sessions for aptitude, verbal, technical, and coding in C and JAVA that were associated with placement.</p> <p>Remarks/suggestions: Advised to conduct training sessions on Python programming.</p>

34	Placements
	<p>Observations: Ninety Five (95) number of students got placed in different companies.</p> <p>Remarks/suggestions: Appreciated the department for achieving better placements than in prior academic years.</p>
35	Counseling/Mentoring
	<p>Observations: Mentoring on academic challenges was seen to be conducted by mentors once in every two weeks. Few students have received personal counseling.</p> <p>Remarks/suggestions: Slow learners were counseled by their mentor to improve their overall performance in academics.</p>
36	Career Counselling
	<p>Observations: No programmes were organized by the department.</p> <p>Remarks/suggestions: Advised to organize career counselling programmes in the department for student's bright career.</p>
37	Professional Development Programmes Conducted For Faculty
	<p>Observations: A One week FDP on "Modern Research Innovative Techniques In Smart Grid Technologies" from 15.02.2022 to 19.02.2022.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
38	Professional Development Programmes Attended by faculty
	<p>Observations: All the faculty members attended for Forty Three (43) different FDP's in both online and offline mode.</p> <p>Remarks/suggestions: Appreciated the department for having good number of faculty participation.</p>
39	Professional Development Programmes Organized for Non-Teaching Staff
	<p>Observations: No PDP was organized for Non-Teaching Staff in this semester.</p> <p>Remarks/suggestions: Advised to organize the professional development programs for the non teaching staff in every semester.</p>
40	Faculty Publications
	<p>Observations: Total Thirty Nine (39) papers were published by the faculty in different international & National journals.</p> <p>Remarks/suggestions: Appreciated the department for publishing good number of</p>

	journals.
ADMINISTRATIVE AUDIT	
1	Classrooms
	<p>Observations: Eight (8) rooms were allotted for class work. All the classrooms are equipped with teaching aids such as projector, projector screen, Board and audio component.</p> <p>Remarks/suggestions: -----</p>
2	Laboratories
	<p>Observations: It is observed that laboratory files for maintenance have been updated.</p> <p>Remarks/suggestions: Advised to solve lab maintenance issues as early as possible.</p>
3	Department Library
	<p>Observations: Advanced learners are allowed to department library to study the academics and journals. The entry register was maintaining by the department.</p> <p>Remarks/suggestions: No maintenance issues were recorded.</p>
4	Computing Equipment
	<p>Observations: Total 76 computing equipments are available in the department.</p> <p>Remarks/suggestions: Sufficient number of computing equipment is available in the department.</p>
5	Website Updates
	<p>Observations: Updating regularly.</p> <p>Remarks/suggestions: Advised to update the NLTS event in the departmental window of the college website.</p>
6	Meetings (Faculty, Cells, Committees, Student Bodies)
	<p>Observations: Faculty meetings were conducted twice in a month. Meetings were conducted once in a month under Student Association. Class committee & Course committee meetings were organized by the department as per the schedule given in Academic Calendar.</p> <p>Remarks/suggestions: Advised to record the action taken of all the meetings.</p>
7	General Maintenance
	<p>Observations: One of the class room windows has to be repaired.</p> <p>Remarks/suggestions:</p>
8	Extension Activities (Activities, Awards, Outreach)

	<p>Observations: Three (3) programmes under NSS were conducted by the department.</p> <ol style="list-style-type: none"> 1. Dr. A.P.J.ABDUL KALAM's Birthday on 15-10-2021. 2. HOMI J BABA's Birthday Event on 30-10-2021. 3. ALBERT EINSTEIN's Birthday on 14.03.2022. <p>Remarks/suggestions: Appreciated the department for conducting good number of extension activities.</p>																				
9	Student Grievance Redressal																				
	<p>Observations: One grievance was recorded and resolved in this semester.</p> <p>Remarks/suggestions: Congratulations to the Departmental class committee meetings to be a great help in resolving students grievances.</p>																				
10	Alumni(Data Updates, Visits, Benefits Derived, Alumni Meets)																				
	<p>Observations: Alumni meet was conducted on 08.01.2022.</p> <p>Remarks/suggestions: Institutional & departmental Alumni meet was organized and good number of alumni were attended and interacted with their juniors.</p>																				
11	Any other																				
	<p>Observations: -----</p> <p>Remarks/suggestions:</p>																				
12	Attendance (Final-End Semester)																				
	<table border="1"> <thead> <tr> <th>Year</th> <th>No of Students</th> <th>Promoted</th> <th>Condoned</th> <th>Detained</th> </tr> </thead> <tbody> <tr> <td>II/I</td> <td>66</td> <td>61</td> <td>8</td> <td>5</td> </tr> <tr> <td>III/I</td> <td>108</td> <td>103</td> <td>7</td> <td>5</td> </tr> <tr> <td>IV/I</td> <td>115</td> <td>109</td> <td>4</td> <td>6</td> </tr> </tbody> </table>	Year	No of Students	Promoted	Condoned	Detained	II/I	66	61	8	5	III/I	108	103	7	5	IV/I	115	109	4	6
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II/I	66	61	8	5																	
III/I	108	103	7	5																	
IV/I	115	109	4	6																	
	<p>Observations: For every 15 days attendance calculation was done, information to parents over phone, mentor counseling to attendance shortage students all such information is maintained in the file.</p> <p>Remarks/suggestions: Advised to do Effective follow up to reduce the shortage of attendance.</p>																				

Section-3: Overall Observations and Recommendations

IQAC team has conducted periodical verification of various aspects pertaining to activities of entire semester. Find the following overall observations and recommendations for your department.

- 1) Suggested to complete the syllabus as per syllabus completion targets.
- 2) Advised to upload the course contents in Moodle before the starting of the semester
- 3) Suggested to conduct more certificate and value added courses for the students
- 4) Advised to conduct more guest lectures by eminent speakers.
- 5) Advised to organize more industrial visits for all class students.
- 6) Advised to conduct workshops/ seminars to the students under each MoU in the coming semester
- 7) Advised to conduct training sessions on Python programming.
- 8) Advised to organize career counselling programmes in the department for student's bright career.

Please make sure that future non-conduct or short comings are not repeated in this manner.

Action Taken for previous Academic Administrative Audit (AAA):

1. **Suggested to organize the programs for not attained COs in coming semesters.**

Organized the programs for the courses which are not attained their target level.

2. **Advised to conduct workshops/ seminars to the students under MoU in the coming semester:**

Conducted programmes in association with the industries having MOU with the department.

3. **Suggested to invite companies offer high package:**

Students got placements with good package.

4. **Advised to plan alumni meet in the upcoming semester:**

Alumni meet was organized by the department in this semester.

1. Signature: P. R. W.

(Name: Dr. A. V. S. Prasad.)

3. Signature: Santhi

(Name: Mrs. N. Santhi Kumari)

2. Signature: J. Sreenivasulu

(Name: J. Sreenivasulu)

4. Signature: Dr. P. Penchel

(Name: Dr. P. Penchel)