

Date: 05.08.2022

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

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

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

**Section-1: Audit Team and Academic Details**

<b>Name of the Department</b>		<b>Electrical and Electronics Engineering</b>			
<b>Date of Audit</b>		<b>01.08.2022</b>			
<b>Academic year</b>		<b>2021-22</b>	<b>Semester</b>	<b>II</b>	
<b>Audit Team</b>					
<b>Sl.No</b>	<b>Name</b>	<b>Designation</b>	<b>Department</b>		
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		

<b>Name of the Head of the Department</b>		<b>Dr. G VENKATESWARLU</b>				
<b>Mail ID</b>	<b>hodeee@necn.ac.in</b>	<b>Mobile No</b>			<b>7780555391</b>	
<b>Sl. No</b>	<b>Program offered</b>	<b>Strength</b>				
		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>Total</b>
1	<b>B.Tech I SEM</b>	<b>64</b>	<b>62</b>	<b>103</b>	<b>108</b>	<b>337</b>

## Section-2: Aspects, Observations, Remarks/Suggestions

<b>ACADEMIC AUDIT</b>	
<b>Sl. No</b>	<b>Aspects/Activities – Observations – Remarks/Suggestions</b>
<b>1</b>	<b>Academic Calendar- Implementation</b>
	<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>
<b>2</b>	<b>Syllabus coverage</b>
	<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>
<b>3</b>	<b>Moodle Upload</b>
	<p>Observations: College Learning Management System (LMS) was extensively used by both faculty &amp; students for course materials, PPTs, E-Resources &amp; 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>
<b>4</b>	<b>Course files</b>
	<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>
<b>5</b>	<b>Mapping of COs and POs/PSOs</b>
	<p>Observations: R-21 Regulations COs were defined and CO-PO &amp; PSOs mapping was done and filed properly.</p> <p>Remarks/suggestions: OBE coordinator was suggested to verify the action verb &amp; learning statement of all COs of all courses.</p>
<b>6</b>	<b>CO Attainment &amp; PO Attainment</b>
	<p>Observations: 1. CO Attainments of 2021-22 I semester was done and not attained COs were</p>

	<p>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>
<b>7</b>	<b>ICT usage</b>
	<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>
<b>8</b>	<b>Quality of Question Papers</b>
	<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>
<b>9</b>	<b>Evaluation of Answer Scripts</b>
	<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>
<b>10</b>	<b>Slow and Advanced Learners</b>
	<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>
<b>11</b>	<b>Remedial Classes</b>
	<p>Observations: The following remedial classes were conducted for this semester.</p> <ol style="list-style-type: none"> <li>1. SS for III-I</li> <li>2. DCP for III-I</li> <li>3. PSA for III-I</li> <li>4. AEC for II-I</li> <li>5. EMF for II-I</li> <li>6. LCS for II-I</li> </ol> <p>Remarks/suggestions: All the documents are filed properly.</p>
<b>12</b>	<b>Remedial Coaching</b>

	<p><b>Observations:</b> Remedial coaching was conducted for the following subjects: 1. " AC Machines" for III EEE 8 students from 06.07.2022 to 07.07.2022. 2. " HVDC &amp; FACTS" for III EEE students (9) from 08.07.2022 to 09.07.2022. 3. " IHEV" for III EEE students (25) from 08.07.2022 to 09.07.2022. .</p> <p><b>Remarks/suggestions:</b> All the related documents are maintaining properly.</p>
<b>13</b>	<b>Guest Lectures</b>
	<p><b>Observations:</b> Organized one guest lecture on 1. "Industrial Applications of Power Electronics" by Mr. A. Saravana Kumar, Senior Hardware Engineer Power Electronics Pvt. Ltd Hyderabad on 12-05-2022. 2. "Power Plant Engineering - Boilers" by Mr. Jagannathan S, Executive Engineer, Thermal Power Plant-I, Chennai on 17.05.2022.</p> <p><b>Remarks/suggestions:</b> Advised to conduct more guest lectures by eminent speakers.</p>
<b>14</b>	<b>Lecture Schedule Verification</b>
	<p><b>Observations:</b> It is observed that few courses were deviated from the pre scheduled lesson plan.</p> <p><b>Remarks/suggestions:</b> Extra classes for deviations have been taken in order to comply to the session plan.</p>
<b>15</b>	<b>Lab Records/Manuals</b>
	<p><b>Observations:</b> It was observed that all the faculty dealt the labs have done continuous evaluation of records and manuals.</p> <p><b>Remarks/suggestions:</b> 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>
<b>16</b>	<b>Continuous Evaluation For Practical Courses</b>
	<p><b>Observations:</b> Continuous evaluation of practical courses was done during semester.</p> <p><b>Remarks/suggestions:</b> The continuous evaluation books were updated regularly.</p>
<b>17</b>	<b>Students Project Evaluation and Review</b>
	<p><b>Observations:</b> Four Internal evaluations have completed and external evaluation is yet to be conducted.</p> <p><b>Remarks/suggestions:</b> All the relevant documents were filed properly.</p>
<b>18</b>	<b>Internships</b>
	<p><b>Observations:</b> No internships were done by the students for this semester.</p> <p><b>Remarks/suggestions:</b> -----</p>

<b>19</b>	<b>Partial Delivery by Industrial Experts</b>
	<p>Observations: There was two partial deliveries by industry experts 1. Power System Analysis for III B.Tech/ II Sem students by Mr. Bhavani Singh, General Manager, SSK Delta Design Engineering (P) Ltd., Chennai. 2. Neural Networks and Fuzzy Logic for III B.Tech/ II Sem students by Mr. B. Vamsi Kumar Sharma, Simulation Engineer, Sim Info Systems, Chennai.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
<b>20</b>	<b>Adjunct Faculty</b>
	<p>Observations: Mr. P.V Ramanaiah, Rtd.DE, Transformer, division, APSPDCL, Nellore has completed 18 hours of IV EEE Project.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
<b>21</b>	<b>Topic/Content Beyond Syllabus</b>
	<p>Observations: 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> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
<b>22</b>	<b>Newsletter/Technical Magazine/Wall Papers etc.</b>
	<p>Observations: 1. All departmental events were published in the departmental newsletters for the Second semester of the academic year 2021-22. 2. The department's Technical Magazine for II semester of 2021-22 has been published.</p> <p>Remarks/suggestions: Newsletter and technical magazines are maintaining in department library also.</p>
<b>23</b>	<b>Student Feedback on TLP</b>
	<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>
<b>24</b>	<b>Feedback on Curriculum</b>
	<p>Observations: It was observed that feedback on curriculum was collected from stake holders i.e., students, faculty, employers &amp; alumni and submitted the same to IQAC for the analysis.</p> <p>Remarks/suggestions: Work done is appreciable.</p>
<b>25</b>	<b>Value added courses / Certificate Courses</b>

	<p>Observations: Conducted one Value Added Courses on "IoT with NodeMCU" by Technotran Electronics Solutions from 30.05.2022 to 04.06.2022.</p> <p>Remarks/suggestions: Suggested to conduct more certificate and value added courses for the students.</p>
<b>26</b>	<b>Industrial Visits</b>
	<p>Observations: Two industrial visit were organized 1. "33/11KV Substation, Haranathapuram" for II EEE students on 08.07.2022. 2. " Dr. NTPS, Vijayawada" for III EEE students on 03.06.2022.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
<b>27</b>	<b>MOUs</b>
	<p>Observations: Two activities were conducted under 2 MoU's. 1. "Value Added Course on IOT with Node MCU" by Technotran Electronic Solutions, Nellore from 30.05.2022 to 02.06.2022. 2. "SEMINAR ON POWER MANAGEMENT USING PLC &amp; SCADA" by ETCAM Institute of EEE Engineers on 18.08.2022.</p> <p>Remarks/suggestions: Advised to conduct workshops/ seminars to the students under each MoU in the coming semester.</p>
<b>28</b>	<b>Professional society activities</b>
	<p>Observations: Three(3) Programs were organized under professional society activities 1. A Seminar on "Development Challenges for Embedded controller Applications" by Mr. A.Avinash, Team Leader, Verzeo Bangalore (IEEE) on 02-09-2022. 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 02-09-2022. 3. "Seminar On Power Management Using Plc &amp; Scada" by SK.Amenuddin, Field Operation Manager, ETCAM Institute of EEE Engineers on 18-08-2022.</p> <p>Remarks/suggestions: Appreciated the department for conducting good number of activities by professional society bodies.</p>
<b>29</b>	<b>Industry Institute Interaction Cell Activities</b>
	<p>Observations: The following programmes were conducted by IIC: 1. A Technical talk on "An Overview of Artificial Intelligence Techniques in Power system and motor drive" by Mr. A. Praveen Kumar, Tech lead-TCS, Bengaluru on 23-03-2022. 2. A seminar on "Innovative solutions in Electrical Engineering" by Mr. Srikanth Muppala, Director &amp; Founder SkillDzire, Hitech city, Hyderabad, Telangana, India on 16-05-2022.</p>

	<p>3. A five days workshop on "Importance of current transformer and Implementation in Electrical protection" by SK. Amenuddin, Field operation Manager, ETCAM Institute of EEE Engineers, TCCGES Pvt.Ltd. Nellore from 06.06.2022 to 10.06.2022.</p> <p>Remarks/suggestions: Appreciated for conducting good number of programmes under IIC.</p>
<b>30</b>	<b>Student Association Activities</b>
	<p>Observations: Eight (8) activities were organized by the department under student association.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
<b>31</b>	<b>Student External Participation</b>
	<p>Observations: One hundred and eighteen (118) students were participated in events of other institutions in this semester and won Nine (9) prizes in different activities.</p> <p>Remarks/suggestions: Advised to encourage the students to participate in technical events organized by other institutions.</p>
<b>32</b>	<b>Workshops/Seminars/Conferences/NLTS Etc., Conducted</b>
	<p>Observations: One National Level Technical Symposium was organized by the department.</p> <p>Remarks/suggestions: All relevant documents were filed. Advised to organize workshops and seminars to the students for their academic benefit.</p>
<b>33</b>	<b>Placement Training (Internal &amp; External)</b>
	<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 more placement training sessions.</p>
<b>34</b>	<b>Placements</b>
	<p>Observations: No student was placed in this semester.</p> <p>Remarks/suggestions: Advised to encourage the students to participate in placement selections.</p>
<b>35</b>	<b>Counseling/Mentoring</b>
	<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: -----</p>
<b>36</b>	<b>Career Counselling</b>

	<p>Observations: One programme was organized by the department. 1. Webinar on "Career Opportunities After B.Tech" by C.Seravan Kumar, M.Tech (Ph.D), MISTE, ACE Engg Academy, Tirupathi on 06/05/2022.</p> <p>Remarks/suggestions: Advised to organize career counselling programmes in the department for student's bright career.</p>
<b>37</b>	<b>Professional Development Programmes Conducted For Faculty</b>
	<p>Observations: A One week FDP on " Application Of Power Converters In Distributed Generation And Microgrid" from 19.09.2022 to 23.09.2022.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
<b>38</b>	<b>Professional Development Programmes Attended by faculty</b>
	<p>Observations: All the faculty members attended for Twenty Three (23) different FDP's in both online and offline.</p> <p>Remarks/suggestions: Appreciated the department for having good number of faculty participation.</p>
<b>39</b>	<b>Professional Development Programmes Organized for Non-Teaching Staff</b>
	<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>
<b>40</b>	<b>Faculty Publications</b>
	<p>Observations: Total Thirty Nine(39) papers are published by the faculty in different international &amp; National journals.</p> <p>Remarks/suggestions: Appreciated the department for publishing good number of journals.</p>
<b>ADMINISTRATIVE AUDIT</b>	
<b>1</b>	<b>Classrooms</b>
	<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>
<b>2</b>	<b>Laboratories</b>
	<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>



<b>3</b>	<b>Department Library</b>
	<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 issue was recorded.</p>
<b>4</b>	<b>Computing Equipment</b>
	<p>Observations: Total 34 computing equipments are available in the department.</p> <p>Remarks/suggestions: Sufficient number of computing equipment is available in the department.</p>
<b>5</b>	<b>Website Updates</b>
	<p>Observations: Updating regularly.</p> <p>Remarks/suggestions: Advised to update the industrial visits data in the departmental window of the college website.</p>
<b>6</b>	<b>Meetings (Faculty, Cells, Committees, Student Bodies)</b>
	<p>Observations: Faculty meetings were conducted for every fort night. Meetings were conducted once in a month under Student Association.</p> <p>Remarks/suggestions: Advised to record the minutes of meeting of all cells.</p>
<b>7</b>	<b>General Maintenance</b>
	<p>Observations: No maintenance indent has been raised in the department.</p> <p>Remarks/suggestions: ----</p>
<b>8</b>	<b>Extension Activities (Activities, Awards, Outreach)</b>
	<p>Observations: No programme was organized under NSS by the department.</p> <p>Remarks/suggestions: Advised to conduct extension activities.</p>
<b>9</b>	<b>Student Grievance Redressal</b>
	<p>Observations: There was no grievance recorded.</p> <p>Remarks/suggestions: -----</p>
<b>10</b>	<b>Alumni(Data Updates, Visits, Benefits Derived, Alumni Meets)</b>
	<p>Observations: No activities were arranged to or by the alumni in this semester.</p> <p>Remarks/suggestions: Advised to arrange alumni meets and interactions.</p>
<b>11</b>	<b>Any other</b>
	<p>Observations: -----</p> <p>Remarks/suggestions:</p>

12	Attendance (Final-End Semester)				
	Year	No of Students	Promoted	Condoned	Detained
	II/II	62	62	1	0
	III/II	103	103	2	0
	IV/II	108	108	0	0
<p><b>Observations:</b> 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><b>Remarks/suggestions:</b> 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 conduct more certificate and value added courses for the students
- 2) Advised to encourage the students to participate in technical events organized by other institutions.
- 3) Advised to organize workshops and seminars to the students for their academic benefit.
- 4) Advised to conduct more placement training sessions.
- 5) Advised to organize career counselling programmes in the department for student's bright career.
- 6) Advised to organize the professional development programs for the non teaching staff in every semester.
- 7) Advised to record the minutes of meeting of all cells.

Please ensure such or similar Non conduction/short comings do not recur in future.

#### Action Taken for previous Academic Administrative Audit (AAA):

1. Advised to upload the course contents in Moodle before the starting of the semester:

All the faculty have uploaded the course contents in moodle before the starting of semester.

**2. Suggested to conduct more certificate and value added courses for the students:**

One value added course was organized by the department.

**3. Advised to conduct more guest lectures by eminent speakers:**

Two Guest Lectures were arranged for the students by industry persons.

**4. Advised to organize more industrial visits for all class students:**

Organized two industrial visits for III & IV EEE students.

**5. Advised to organize career counselling programmes in the department for student's bright career:**

Organized one career guidance programme.

1. Signature: Pem

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

3. Signature: Santhi

(Name: N. Santhi Kumari).

2. Signature: M

(Name: C. J. Sreenivasulu).

4. Signature: P. Penchel

(Name: Dr. P. Penchel).