

Date: 05.10.2021

Internal
Academic and Administrative Audit
For
Semester- I & II, AY: 2020-2021

Academic and Administrative Audit report for the academic year 2020-21, semester I & II 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		01.10.2021		
Academic year		2020-21	Semester	I & II
Audit Team				
Sl.No	Name	Designation	Department	
1.	Dr AVS Prasad	Professor	CE	
2.	Dr R Gayathri	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	hodeee@necn.ac.in	Mobile No		7780555391		
Sl. No	Program offered	Strength				
		I	II	III	IV	Total
1	B.Tech I SEM	59	112	120	114	405
2	B.Tech II SEM	59	110	118	114	401

Section-2: Aspects, Observations, Remarks/Suggestions

ACADEMIC AUDIT	
Sl. No	Aspects/Activities – Observations – Remarks/Suggestions
1	Academic Calendar- Implementation
	<p>Observations: The department prepares its own academic event calendar per semester in accordance to JNTUA schedules and has been following strictly the changes in JNTUA Calendar due to Covid-Pandemic. For I B.Tech I & II semesters Autonomous Academic calendars were prepared and conducted all exams and events specified in calendars.</p> <p>Remarks/suggestions: As per academic calendar, classes were conducted online & offline smoothly and activities were conducted with some deviation due to Covid-19.</p>
2	Syllabus coverage
	<p>Observations: It was observed that syllabus coverage was verified based on syllabus completion targets in online once in two weeks. Few subjects were deviated from the schedule due to health issues of faculty.</p> <p>Remarks/suggestions: The syllabus was completed in-time by taking extra classes for some subjects.</p>
3	Moodle Upload
	<p>Observations: College Learning Management System (LMS) was extensively used by both faculty & students for question banks of assignments and Mid-term examinations.</p> <p>Remarks/suggestions: Appreciation to Moodle coordinator for extensive use of Moodle.</p>
4	Course files
	<p>Observations: Department is maintaining course files for all individual subjects of the respective regulations.</p> <p>Remarks/suggestions: Some of the course files didn't have all the contents to be filed.</p>
5	Mapping of COs and POs/PSOs
	<p>Observations: R-20 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 subjects.</p>
6	CO Attainment & PO Attainment
	<p>Observations: 1. CO Attainments of 2019-20 I semester & 2020-21 I semester was done and not attained COs were listed. 2. PO Attainment for 2016-20 & 2017-21 batches was done.</p>

	Remarks/suggestions: Suggested to list the action taken for not attained COs.
7	ICT usage
	<p>Observations: The department practicing the blended teaching learning methods implemented during the pandemic like ICT usage, online classes, assignments for students etc for effective lecture delivery and making 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: Advised to improve question paper quality in terms of national level exams like GATE, IES.</p>
9	Evaluation of Answer Scripts
	<p>Observations: Evaluation of all assignment & Mid-term answer scripts was done and marks were posted after circulating among students.</p> <p>Remarks/suggestions: Advised to evaluate the answer scripts within three days of completion of the examination.</p>
10	Slow and Advanced Learners
	<p>Observations: Based on the result analysis up to previous semester, the students were divided into slow learners & advanced learners for two semesters and the lists were filed.</p> <p>Remarks/suggestions: Advised to send the advanced learners list to all the advanced learner activities in-charges for their reference.</p>
11	Remedial Classes
	<p>Observations: It is observed that no remedial classes were conducted due to pandemic.</p> <p>Remarks/suggestions: -----</p>
12	Remedial Coaching
	<p>Observations: It was observed that no remedial coaching was arranged due to pandemic.</p> <p>Remarks/suggestions: All the related documents are maintaining properly.</p>
13	Guest Lectures
	Observations:

	<p>Organized five guest lectures on</p> <ol style="list-style-type: none"> 1. "Key Issues And Challenges In Smart Grid Technology" by Dr. S Ravindra, Professor in Department of EEE, VVIT, Guntur, on 04-01-2021 to 09-01-2021. 2. "Modern Trends In Substation " by T. Venkateswarlu, Assistant Engineer, APSPSDCL, Nellore on 25-04-2021. 3. "Choppers and Regulators" by Shaurya Sabharwal, Hitachi Hi-Rel Power Electronics, Bangalore, Karnataka on 20-01-2021. 4. "Transformer Design & Testing" by Mr. T Mahidhar, Weber India Infra Power (OPC) Pvt. Ltd, Venkatachalam, Nellore from 02-03-2021 to 05-03-2021. 5. "Scada Applications in Power System" by K. Saraswathi Chandra, Marketing Engineer, Hyderabad on 18-11-2020. <p>Remarks/suggestions: All the relevant documents were filed.</p>
14	Lecture Schedule Verification
	<p>Observations: It is observed that the lecture delivery was as per the session plans of all courses.</p> <p>Remarks/suggestions: In order to adhere the session plan, extra classes for deviations have been taken.</p>
15	Lab Records/Manuals
	<p>Observations: It was observed that stock registers and lab manuals are updated.</p> <p>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 not done during semester due to pandemic. Virtual labs and simulation experiments were done in online. And the remaining experiments were conducted as per JNTUA schedule.</p> <p>Remarks/suggestions: -----</p>
17	Students Project Evaluation and Review
	<p>Observations: All the project reviews including external review were conducted as per schedule in online.</p> <p>Remarks/suggestions: All the files were updated and maintaining properly.</p>
18	Internships
	<p>Observations: Forty Six (46) numbers of students have completed their internship in this academic year.</p> <p>Remarks/suggestions: Due to pandemic, most of the companies were not allowed to do internship.</p>

19	Partial Delivery by Industrial Experts
	<p>Observations: There was three partial deliveries by industry experts</p> <ol style="list-style-type: none"> 1. Power Semiconductor Devices for III B.Tech/ II Sem students by Mr. K Suresh, Divisional Engineer, APGENCO, Muthukur, Nellore. 2. Power System Operation and Control for IV B.Tech/ I Sem students by Mr. V. Madhukar Assoc. Director, Prolific System and Technologies (P) Ltd., Hyderabad. 3. Flexible AC Transmission and Control for IV B.Tech/ I Sem students by Mr. T Tirumal Rao, JK Power Converters, Bangalore. <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
20	Adjunct Faculty
	<p>Observations: Mr.T Mahider, SE, Weber India Infra Power OPC Pvt.LTD, Venkatachalam, Nellore have taken 58 hours for III EEE of Electrical Machines-III course.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
21	Topic/Content Beyond Syllabus
	<p>Observations: Three (9) topic/content beyond syllabus classes were conducted for this semester.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
22	Newsletter/Technical Magazine/Wall Papers etc.
	<p>Observations: 1. All departmental events were published in the departmental newsletters for the first and second semesters of 2020-21. 2. The department's Technical Magazine for I & II semester of 2020-21 has been published.</p> <p>Remarks/suggestions: Advised to place the newsletter and technical magazines in the department library.</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 two certificate courses on</p> <p>i) "Basics of C & CPP" from 9/11/2020 to 25/03/2021 in Association with spoken tutorial collaborated with IIT Bombay.</p> <p>ii) "Fundamentals of Python" from 14/10/19 to 18/10/19 in association with Think Campus, Hyderabad.</p> <p>Conducted two Value Added Courses on</p> <p>i) Machine Learning For Engineers Using Python by Green Corner Tech, Ramamurthy Nagar, Nellore from 01.02.2021 to 05.02.2021.</p> <p>ii) Introduction To Hybrid Electric Vehicles Using Simulation by TVS Training and Service Ltd, Ambattur Industrial Estate, Chennai, Tamil Nadu from 19.01.2021 to 23.01.2021.</p> <p>Remarks/suggestions: All the documents related to Certificate course & Value added Course were filed properly.</p>
26	Industrial Visits
	<p>Observations: No industrial visit was organized by the department because industries didn't allow students in pandemic.</p> <p>Remarks/suggestions: -----</p>
27	MOUs
	<p>Observations: Department has 7 active MOU's. Two activities were conducted under 2 MoU's.</p> <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: Six Programs were organized under professional society activities</p> <ol style="list-style-type: none"> 1. Seminar on Protection & Control Strategy on Distribution Substation by Sri M.Siva Kumar Reddy, Assistant Engineer, 33kV/11kV Substation, Haranatha Puram, Nellore on 17-06-2021. 2. A Technical Talk on Significance of Renewable Energy Sources in Sustainable Development by Mr.Vimala Kumar, Associate Professor, Dept. of EEE, JNTU Kakinada, AP on 14.06.2021. 3. A Technical Talk on Advance Control Techniques and Parameter Determination of Ac Electrical Machines by Dr.John Luke Baktha Singh , Professor, Dept. of EEE, VVIT, Guntur, AP on 31-05-2021. 4. Awareness Program on Indian Engineering Services by Sri S.M .Trinath, ESE and GSM Faculty, ACE Engineering Faculty, Hyderabad on 12-02-2021. 5. An Over View of Power Quality In Electrical Power System by M. Siva Kumar Reddy, Assistant Engineer, CT-Meter-1, APSPDCL, Nellore on 28-01-2021.

	<p>6. A Technical Talk on Enhancement of Voltage Stability at Micro Grid System Using Modern Controllers by SK. Amenuddin, Field operation Manager, ETCAM Institute of EEE Engineers, TCCGES Pvt. Ltd. Nellore on 16-09-2020.</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: Forty Six (46) number of students have completed their internship in association with different industries under IIC.</p> <p>The following programmes were also conducted by IIC:</p> <ol style="list-style-type: none"> 1. A Seminar on Industrial Furnaces by Mr. K Venugopal, Krushi Biotechs, Hyderabad on 05-01-2021. 2. A Seminar on Power Quality Improvement Techniques by Mr. T Tirumala Rao, Pantech e-learning Solutions, Chennai on 14-12-2020. <p>Remarks/suggestions: Appreciated for conducting seminars under IIC cell even in pandemic.</p>
30	Student Association Activities
	<p>Observations: No activities were organized by the department under student association due to pandemic.</p> <p>Remarks/suggestions: -----</p>
31	Student External Participation
	<p>Observations: Fourteen (14) number of students' participated in events like PPT, Poster Presentation, Technical Quiz, Coding, Technical Treasure hunt, fashion show, etc.... and secured 5 prizes in various events.</p> <p>Remarks/suggestions: All sample certificates were filed and are advised to post the list of prize winners in all student whatsapp groups.</p>
32	Workshops/Seminars/Conferences/NLTS Etc., Conducted
	<p>Observations: Two workshops & Two Seminars were organized by the department.</p> <p>Remarks/suggestions: All relevant documents were filed.</p>
33	Placement Training (Internal & External)
	<p>Observations: Placement related training programmes on Aptitude, Verbal, Technical, coding on C and JAVA were organized by the department and placement cell.</p> <p>Remarks/suggestions: Suggested to invite companies that offer high package.</p>
34	Placements

	<p>Observations: Seventy Four (74) number of students got placed in different companies.</p> <p>Remarks/suggestions: Appreciated the department for getting the better placements than previous academic years.</p>
35	Counseling/Mentoring
	<p>Observations: On-line mentoring on academic challenges was seen to be conducted by mentors once every two weeks. Few students have received personal counseling.</p> <p>Remarks/suggestions: Appreciated The procedure that was implemented.</p>
36	Career Counseling
	<p>Observations: Four programmes were organized on</p> <ol style="list-style-type: none"> 1. International Webinar on "Awareness Programme on Higher Education and Opportunities in USA" by Ms. Elizabeth Argo, Director Recruitment, ICT Corp, Virginia, USA on 29-05-2021. 2. Awareness Programme on GATE-2022 by G. Srinivas, Director of GSN Academy, Thirupathi on 17-02-2021. 3. Awareness on GATE by K. Sai Pavan, faculty GSN academy on 15-02-2021. 4. Awareness Program on Overseas Education by Mr. D. Kanthi Kiran & S. Padma Kiran, New Edge Overseas Education Consultancy, Vijayawada on 30-12-2020. <p>Remarks/suggestions: Appreciated for organizing good number of career guidance programs for the students.</p>
37	Professional Development Programmes Conducted For Faculty
	<p>Observations:</p> <ol style="list-style-type: none"> 1. A One week FDP on "Key Issues and Challenges in Smart Grid Technology "from 04.01.2021 to 09.01.2021. 2. A five day FDP on "Micro Grid Applications To Renewable Energy Resources" from 06.04.2021 to 10.04.2021. <p>Remarks/suggestions: Appreciated for conducting two Faculty Development programmes.</p>
38	Professional Development Programmes Attended by faculty
	<p>Observations: Total 11 faculty members attended for Forty Three (43) different FDP's in both online and offline.</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: One day PDP was organized on "Safety Measures in the Laboratories" on 19.02.2021.</p> <p>Remarks/suggestions: All the relevant documents were filed properly.</p>
40	Faculty Publications
	<p>Observations: Total Forty four (44) papers are published by the faculty in different international & National journals. Three professors from the department have published six (6) books and one (1) book chapter.</p> <p>Remarks/suggestions: Appreciated the department for publishing books & book chapters.</p>
41	Funded Projects and consultancy
	<p>Observations: Five funded projects were sanctioned by</p> <ol style="list-style-type: none"> 1. TCCGES Pvt. Ltd, Nellore, AP for the project "Achieving the inverse characteristics for over current by using micro control and RC circuit" for four months. 2. Takeoff Edu. Group, Tirupati for the project "Programmable smart load shedding time management system for utility application" for three months. 3. Green Corner Tech, Nellore for the project "Design of power factor meter using Arduino" for three months. 4. Narayana Medical College, Nellore for the project "Electrical System Testing" for two weeks. 5. Nanda Chemicals, Sarvepalli for the project "Electrical System Testing" for one week. <p>Remarks/suggestions: Appreciated for getting good number of funded projects.</p>
ADMINISTRATIVE AUDIT	
1	Classrooms
	<p>Observations: Nine (9) 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 women's forum events 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.</p> <p>Remarks/suggestions: Advised to record the minutes of meeting of professional society and coding club.</p>
7	General Maintenance
	<p>Observations: Total three times maintenance indent have been raised and completed.</p> <p>Remarks/suggestions: Advised to maintain the separate file and update the same periodically.</p>
8	Extension Activities (Activities, Awards, Outreach)
	<p>Observations: Conducted thirty five (35) programmes under NSS by the department in the academic year 2020-21 in both online & offline modes.</p> <p>Remarks/suggestions: Appreciated the department for conducting more service oriented programmes.</p>
9	Student Grievance Redressal
	<p>Observations: There was one grievance was recorded. Discipline Issue regarding first year EEE Students. initiated a fight with EEE classmates during break session in corridor.</p> <p>Action: Conducted counselling in front of parents and issued suspension letter for one week.</p> <p>Remarks/suggestions: -----</p>
10	Alumni(Data Updates, Visits, Benefits Derived, Alumni Meets)
	<p>Observations: No alumni visits and alumni meets were conducted due to pandemic.</p>

	Remarks/suggestions: Advised to plan alumni meet in the upcoming semester.				
11	Any other				
	Observations: -----				
	Remarks/suggestions:				
12	Attendance (Final-End Semester)				
	Year	No of Students	Promoted	Condoned	Detained
	II/I	112	112	0	0
	III/I	120	120	2	0
	IV/I	114	110	0	4
	II/II	110	108	1	2
	III/II	118	115	1	3
	IV/II	114	114	6	0
	<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 organize the programs for not attained COs in coming semesters.
- 2) Advised to improve question paper quality in terms of national level exams like GATE, IES.
- 3) Advised to conduct workshops/ seminars to the students under each MoU in the coming semester.
- 4) Suggested to invite companies offer high package.
- 5) Advised to solve lab maintenance issues as early as possible.
- 6) Advised to plan alumni meet in the upcoming semester.

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 conduct at least one certificate course for each class.

Conducted two certificate courses for II & III EEE students

2. Advised to conduct the Remedial classes for all mathematical oriented subjects.

No remedial classes were arranged due to pandemic.

3. Advised to arrange an industrial trip to II EEE students.

No Industrial Visit was arranged due to pandemic.

4. Advised to conduct more career guidance programs for the students.

Organized four (4) Career Guidance Programs

5. Suggested to conduct more number of extension programs.

Conducted two (2) extension programs

1. Signature: *Pew*

(Name: *Dr Aris Pqasm*)

3. Signature: *Santhi*

(Name: *N. Santhi Kumari*)

2. Signature: *P. Jayanthi*

(Name: *P. Jayanthi*)

4. Signature: *Acme*

(Name: *Dr. T. Penehaladi*)