ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES

'UGC AUTONOMOUS'

(Permanently Affiliated to Andhra University, Approved by AICTE, Accredited by NBA & NAAC with 'A' Grade)

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ANITS

Date: 10-11-2022

From

HOD, ECE
Anil Neerukonda Institute of Technology and Sciences
Sangivalasa

To
Prof. P. Rajesh Kumar
Professor & HOD, ECE
Department of ECE
Andhra University
Visakhapatnam-530022

Sub: Invitation for IQAC external audit member ANITS ECE Department -Reg.

It gives me immense pleasure in inviting you as subject expert for IQAC external audit member for department of Electronics and Communication Engineering (ECE), of Anil Neerukonda Institute of Technology and Sciences (ANITS) at 9:30 AM on 19-11.2022 (Saturday) in ECE department.

I request you to make it convenient to attend the academic audit and offer your valuable suggestions for the development of the department.

Dr.V.Rajya Lakshmi
Prof & HOD, ECE
Head of the Department
Department of E C E
Anil Neerukonda Institute of Technology & Sciences
Sangivalasa - 531 162

Anil Neerukonda Institute of Technology & Sciences (Autonomous)
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ANITS

Department of Electronics and Communication Engineering

Format for Academic Audit
(to be filled up by Academic Experts)
Academic year 2021-22

1. Name of the Auditor   Prof. P. Rajesh Kumar
   Designation   Prof & HOD. ECE
   Address   Department of ECE, Andhra University
   Contact no.   9440367694
   Email ID   rajeshauce @ gmail. Com

   The days and dates of visit: 19-11-2022

1

Anil Neerukonda Institute of Technology & Sciences (Autonomous)

(Affiliated to AU, Approved by AICTE & Accredited by NBA (ECE,EEE,CSE,IT & Mech.) & NAAC)
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Department of Electronics Communications Engineering
Summary of Academic Audit 2021-2022

S. No.	Parameters of Evaluation	Max Marks	Marks Awarded
1.	Curricula	120	110
2.	Academic Facilities	100	85
3.	Teaching Learning proves	130	112
4.	Evaluation System	140	120
5.	Result	100	76
6.	General Academic Activities	100	76
7.	Feedback and Corrective Action	100	81
8.	Faculty Performance / Upgradation	110	84
9.	Attainment of CO's and PO's of all courses	100	85
10.	Total	1000	829

Grade	Details	Total Marks scored
A+	Excellent	800 and above ✔
A	Good	700-799
B	Acceptable	600-699
C	Not-acceptable	Below 600

1. Strengths
   1) Teaching and Learning process is good
   2) Good Number of Student hardware projects / paper publications
   3) Experiential Learning through online Coures by students and faculty is very good.

2. Weaknesses
   1) R&D activities: Projects, Consultancy and patents needs to be improved
   2) Industry institute interaction activities regarding faculty & students needs to be improved

3. Suggestions based on information
   1) Workshops / FDP's / Seminar and Conferences organization for faculty
   2) Establishment of Enterprenurship Cell / activites

Prof. P. Rajesh Kumar
Professor & HoD, ECE
Andhra University
Dr. P. RAJESH KUMAR
M.E., Ph.D
Professor
Dept. of Electronics & Communication Engg
A.U. College of Engineering (A)
Andhra University
VISAKHAPATNAM - 530 003

1. Curricula

S. No.	Sub-Parameter	Marks Assigned	Marks scored
1.	**Curricula content to provide understanding concepts of (with sufficient practical exposure)**		
	Mathematics and basic sciences	5	5
	Basic Engineering subjects	5	4
	Management and Humanities	6	6
	Programme Core	30	27
	Elective Subjects	6	6
	Interdisciplinary elective subjects	4	4
	Open Elective/Emerging subjects in curricula	4	3
	NPTEL courses/MOOCs	4	3
	Communication and computer skills	5	5
	Proficiency in analysis, synthesis, modeling & simulation and problem-solving skills	5	5
	Innovative and creative abilities	5	4
	Human skills and relations, professional ethics, environment	4	4
	Entrepreneurial skills	4	2
	Hands on training and other industrial needs	4	4
	Self learning practices	4	4
2.	Do the curricula take care of slow and fast learners learning simultaneously ?	10	9
3.	Revision / Upgradation of the curriculum to incorporate appropriate new knowledge systems (based on no. of BoS/ APMC meeting)	15	15
	Total	120	110

Additional Comments / feedback / observations/ advice which may or may not be based on above points:

Establishment of enterprenurship cell/activitun slorngly recommend in the department.

2. Academic Facilities

S. No.	Sub-Parameter	Marks Assigned	Marks scored
1.	No of class rooms with LCDs	5	5
2.	No of laboratories and display of Cos and POs	5	5
3.	No of tutorial rooms	5	4
4.	Faculty rooms / cabins	5	5
5.	Equipments available (curricula and cost wise)	5	5
6.	Computing facilities (including software)	10	8
7.	Research/Project laboratory	10	8
8.	Electric power available for 24 x 7 and power backups	5	4
9.	Audio visual facilities	5	4
10.	Class rooms furniture (quantity and quality)	5	4
11.	Laboratories furniture (quantity and quality)	10	8
12.	No of books e-library, online journals and printed journals related to programme in the central library	10	8
13.	Department library /life long learning resources	10	9
14.	Internet and Wi-Fi facility	5	4
15.	Improvement made in infrastructural facilities during last year	5	4
	Total	**100**	**85**

Any additional comments / feedback / observations / advice which may or may not be based on above points:

E- Resources like Journals / ebooks facility interms of some Computers are arranged in department library.

3. Teaching – Learning Process

Sr. No.	Sub-Parameter	Marks Assigned	Marks scored
1.	**Theory Courses**		
	Course File (Syllabus sheet, Course material, content betond syllabus, MID question papers, Answer sheets, Assignments, External QP, Quizes and Activites)		
	% of subjects for which teaching plan (including books to be referred) is prepared and execution plan submitted at the end of semester (including quality of execution)	10	9
	Quality of teaching plan and notes prepared by faculty	10	9
	Quality of Assignments	10	8
	Case studies/ Mini Projects given as activity for core courses	10	8
	Novel techniques used for effective teaching learning process (including use of A/V aids, development of software/ teaching aids, use or available software, use of available learning resources etc.)	10	8
2.	**Practical**		
	Quality of experiments conducted (Do the experiments designed facilitate the students in generating creative thoughts ?)	10	8
	Availability of laboratory manual and its quality	10	9
	Maintenance of laboratory equipments and new addition	10	10
	New experiments designed by UG/PG Students	10	7
3.	Corrective action taken by department against the students who are absent to the classes regularly	10	9
4.	Staff development programs for Faculty and / or supporting staff including FDP / STTP etc.	10	9
5.	Actions taken by department to improve performance of academically weaker students	10	9
6.	Efforts taken by department to improve overall performance of students including Workshop / Short term course/Hackathons/ Tech fest outside institute etc.	10	9
	Total	130	112

Any additional comments / feedback / observations/ advice which may or may not be based on above points:

1) Experiential learning through online Course by faculty is very good.

2) Teaching learning process is good.

4. Examination and Evaluation System

Sr. No.	Sub-Parameter	Marks Assigned	Marks scored
1	**Examination Process**		
	Strict execution of academic calendar for all examinations	5	5
	Strict execution of academic calendar for declaration of result including revaluation, redressal etc.	5	5
	Transparency in the processes like internal assessment; scrutiny and declaration of result	5	5
	Appropriate weightage for continuous evaluation and end semester examination.	5	5
	Staff appointed for examination (invigilator, squad, office staff etc).	5	5
	Process of appointment of paper setters/ examiners / evaluators / moderators etc.	5	5
	Process of question paper printing and distribution (including quality and format of question paper)	5	5
2	**Quality of internal question papers**		
	Appropriate coverage of syllabus in class test and labelling of COs on the question paper	5	5
	Difficulty level of the question papers including numerical	5	4
	Innovation in question paper (Volume of repeated questions, correlation of question with competitive examinations)	5	4
3	**Quality of external question papers**		
	Coverage of all COs	5	5
	Difficulty level of the question papers (simple to pass and difficult to serve i.e. take care of average as well as sharp students)	5	3
	Do the questions, test and develop the problem –solving skills and students' proficiency in analysis and design ?	5	3
	Whether the marks assigned to the questions appropriate? Are the model answers submitted by paper setters to Examination Cell	5	4
	Language / Clarity / Variety etc in questions (Majority of the questions should not be just like write short note/ explain / discuss etc.	5	3
4	**Does the moderation of each question papers completed before paper printing ?**	5	5
6	**Assessment of Project work / Industrial training/ Internship term work**		
	Continuous assessment of project works/seminars through rubrics	5	5
7	**Assessment Process of theory external papers**		
	Presence of Process for evaluating external papers	5	5
	Model answers and marking scheme	5	3
	Evaluation quality (% of students applying for revaluation and of change in mark cases)	5	4
	Average experience of evaluators	5	2
	Moderation process	5	3
	Revaluation and recounting of answer sheets within mentioned period	5	4
	Does the Complaint Redressal Committee exist to tackle the cases of lapses associated with examinations ?	5	3
	Whether the photocopy of the assessed paper is made	5	5

	available the students, if requested ? Its duration.		
8	**Involvement of external faculty member in the examination work as**		
	Paper setter	5	5
	Evaluator	5	5
	Examiner for practical / oral examination	5	5
	Total	140	120

Additional comments / feedback / observations/ advice which may or may not be based on above points:

1) Quality of External Question papers need to improve in terms of blooms/ Quality levelen.

5. Results

S. No.	Sub-Parameter		Marks Assigned	Marks scored
1	**Performance of students in examinations (Without backlogs)**		60	43
2018-22	% of students passing IV year *0.15	127/195 ×100×0.15	9.77	9.77
2019-23	% of students passing III year *0.15	141/200 ×15	10.58	10.58
2020-24	% of students passing II year *0.15	154/205 ×15	11.27	11.27
2021-25	% of students passing I year *0.15	141/189 ×100×0.15	11.19	11.19
2	**Overall Performance of students (With backlogs)**		40	33
	% of students passing IV year *0.1	172/195 ×100×0.1	8.82	8.82
	% of students passing III year *0.1	169/200 ×10	8.45	8.45
	% of students passing II year *0.1	167/205 ×10	8.15	8.15
	% of students passing I year *0.1	141/189 ×100×0.1	7.46	7.46
	Total		100	76

Additional comments / feedback/ observations / advice which may or may not be based on above points:

Performance of students in without backlogs need to improve.

6. General Academic Activities

S. No.	Sub-Parameter	Marks Assigned	Marks scored
1.	Whether all activities performed as per academic calendar ?	10	10
2.	Whether academic processes are student development centric ?	10	10
3.	% of students actually enroll for co-curriculum activities in or out of the Institute >70% 10 marks 30% to 70% linearly distributed <30% 00 marks.	10	7
4.	Whether co-curriculum activities of institute /department are evenly disturbed throughout the year?	5	4
5.	Are emergency issues resolved by conducting Academic Council / Examination Committee meetings which are ratified in subsequent meetings ?	5	4
6.	How much is overall placement of students (in % based on eligible students) and annual pay package ?	10	8
7.	How is the performance of students in Extension of services through NSS / NCC /Unnath Bharath Abhiyan?	10	5
8.	Industrial visits organized by department	10	8
9.	Technical events organized by the department for faculty and students including STTP / Expert lectures / Model or project competition / GD/ etc.	10	8
10.	Entrepreneurship/ Techno idea activities contest in the department	10	8
11.	Performance in competitive examinations like GATE/ CAT/GRE etc	10	4
	Total	100	76

Additional comments / feedback/ observations / advice which may or may not be based on above points:

1) Student activities like hardware Expo/ Workshops/ Conferences at outside Colleges Need to be improved.

2) Enterprenesuship activities also need to be improved.

7. Student's Feedback and Corrective Action

Sr. No.	Sub-Parameter	Marks Assigned	Marks scored
1	**Feed back during the semester**		
	Frequency of obtaining student's feedback (Meetings of CRCs etc)	20	20
	Corrective action taken at the departmental level	20	17
2	**Suggestion box**		
	Availability of suggestion box	5	3
	How frequently suggestion box is opened ?(Maximum marks for opening twice in a month)	5	3
	Corrective action taken for suggestions at the departmental level	10	7
3	**Exit feed back**		
	Attainment of POs for the academic year	10	8
	Corrective Action of attainment of POs	10	8
4	Survey on outcome of the course / individual class using web tools	20	15
	% of total courses for which survey is done * 20		
	Total	100	81
	Additional comments / feedback/ observations / advice which may or may not be based on above points: Implementation of Suggestion box / Corrective action taken for Suggestion in the Department level may be improved.		

8. Faculty Performance

Sr. No.	Sub-Parameter	Marks Assigned	Marks scored
1	Feedback from students (Department index on 15 points)	20	20
2	Performance appraisal	20	20
3	% of faculty received "**outstanding**" remark *0.2		
	% of faculty received "**Excellent**" remark *0.15		
	% of faculty received " **positively** good" remark *0.1		
3	Qualification enhancement of faculty	5	5
4	Overall performance of department faculty members , based on research paper published in journals, conferences and seminar.	15	10
5	MODROB/ TAPEC/ RPS and other sponsored projects received by the department	5	2
6	Participation of faculty as resource person outside the Institution	10	4
7	Performance of faculty, based on books publication, patent filed and awards.	10	5
8	Performance of faculty, based on consultancy and internal revenue generation (IRG)	10	5
10	Innovative ideas implemented by the faculty for overall development of students both in co-curricular (quality circle, hobby club etc) and extra curricular	10	8
11	Whether guided PG/ Research scholars	5	5
	Total	110	84.

Additional comments / feedback/ observations / advice which may or may not be based on above points:

R|D activities need to be improved.
Overall performance of department faculty
need to be improved.

9. COs and POs of the Programme

Sr. No.	Sub-Parameter	Marks Assigned	Marks scored
1	Framing of COs to all the courses including theory, laboratory, project, Seminar, Industrial Training	15	12
2	Documentation of Justification table for CO-PO articulation table for all courses	15	12
3	Calculation of CO-PO attainment for all courses in the programme	20	17
4	Calculation of POs by indirect attainment (with reasonable sample size)	20	18
5	Reasons for non-attainment of COs and POs if any	15	13
6	Corrective measures for non-attainment of COs and POs	15	13
	Total	100	85
Additional comments / feedback/ observations / advice which may or may not be based on above points: Non-attainment of Co's & Po's action taken and Corrective Measuremet may be improve.			