ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT- TEKKALI

ACADEMIC AUDIT REPORT

Name of the Department: **ELECTRICAL AND ELECTRONICS ENGINEERING**

Academic Year : 2023-24 I Semester (July to December)

Date of Audit : 24-01-2024

I. COs, POs and Curriculum

S. No	Criterion		Observations
1.	COs and POs assessment		COs and POs attainment calculated as per the procedure established by PAC.
2.	Stakeholders feedback related to curriculum design		Graduate exit survey, alumni survey and Employer survey are conducted as per format.
3.	Action taken on minutes of BoS		Incorporated changes as per the suggestions of BoS, DAC and PAC. **Annexure-1.1**
4.	Percentage of lab component		15.9%(10.5/66) – **AR20** 37.5%(7.5/20) – **AR23** **Annexure-1.2**
5.	Evidence of academic flexibility		1 Interdisciplinary Elective+3 Professional elective+ 1 open elective 22.72% (15/66) – **AR20** NIL – **AR23** **Annexure-1.3**

II. Faculty information and their contribution

S. No	Criterion		Observations
1.	Student Teacher ratio		STR - 19.47 **Annexure-2.1**
2.	Faculty Cadre ratio		FCR - 4 : 6 : 15 **Annexure-2.2**
3.	Faculty qualifications		13 out of 25 faculty members are doctorates,9 registered for PhD and rest of the faculty members are post graduates
4.	Faculty experience & retention		**Annexure-2.3** (list of faculty, qualifications, total experience, experience at AITAM)
5.	Faculty contribution in writing: - Books: 01 - Book chapters: 01		**Annexure-2.4**
6.	Faculty in professional bodies -Faculty contributions		**Annexure-2.5** (Memberships and activities) 25 members are having ISTE 3 members are having IE memberships and 3 members are having IETE memberships

7.	Faculty as resource persons in workshops / training activities	Nil
8.	International / National level events organized -Conferences: NIL -Workshops/ Seminars: NIL -FDPs: 01	Number of FDPs/Guest Lectures/Seminars organized: 01 **Annexure-2.6**
9.	List of conferences/seminars/ workshops/ FDP's/ any exclusive programs attended for enrichment of teaching - learning process	17 faculty members attended for FDP's **Annexure-2.7**

III. Teaching-Learning Process and Evaluation

S.No	Criterion	Observations
1.	Student performance indices Attendance Exams	Lists of students for Detention and Condonation are maintained. Results analysis is carried out. **Annexure-3.1**
2.	Mechanism and activities for slow learners improvement	Slow learners are identified based on performance in Mid-exams. Conducted Make-up classes for slow learners. **Annexure-3.2**
3.	Student counseling /mentoring mechanism	20 students are allotted to each faculty member to mentor for continuous improvement. **Annexure-3.3** (Allotment and sample file scanned)
4.	Tutorial classes	Tutorial classes are conducted as per schedule given in the time table
5.	Initiatives taken for innovative projects	No. of Innovative Projects: NIL Training programs for Faculty & Students in thrust areas
6.	Review & Evaluation of Student Projects: - Best projects	Project review and evaluation is carried out as per PRC guidelines. Best projects are identified based on PRC recommendations.
7.	Monitoring of Teaching-Learning Process - Observation of teaching process in classrooms as per schedule - Tracking of syllabus coverage - Uploading of lecture notes, question papers of mid and semester end examinations in e-learning portal - Verification of evaluated answer papers - Checking the quality of mid examination question papers - Innovative teaching methods presented - Verification of course files -Minutes of class committee meetings and action taken	- Attendance registers are verified once in a month. - Compliance of teaching diary with lesson plan is monitored once in a month. - Track sheets are maintained to review syllabus coverage - uploading of course material, mid and semester end question papers in e-Learning Portal - All Mid answer scripts are verified - Mid question papers as per cognitive levels are verified. - PPT's, NPTEL video lectures are used, - Course files are there for all courses. **Annexure-3.4** (Sample lesson plan, teaching diary, sample scanned copy of attendance register with signs of faculty member, HoD and Principal, syllabus coverage and number of classes track sheet, minutes of class committee meetings)

8.	Training programs conducted for students
	   - Guest lectures
	   - Add-on courses
	   - Seminars/workshops
	   - Compliance of department academic calendar
		No. of guest lectures: 03
		No. of Add-on courses: 02
		No. of Seminars/workshops: NIL
		
		No major deviations are observed in the compliance of department academic calendar.
		Annexure-3.5

9.	MoUs with Industries for internship	No. of MoUs: 1 **Annexure-3.6** (If any)
10.	Students feedback and follow-up action	Online feedback is taken from the students for all courses and review is carried out.

11.	Scope for Self-learning
	   - Certificate courses
	   - Online courses
		Monetary encouragement for certification courses

12.	Result analysis and conduct of remedial classes for students with backlogs	Result analysis is carried out after the results of semester end examinations and remedial classes are conducted for students with backlogs **Annexure-3.7** (Result analysis for all the 8 semesters and details of remedial classes)
13.	Placements (%): Industries / organizations:	Placements (%):
14.	Higher studies (%): Institutions:	Higher studies (%):

15.	Student development Activities:
	   - co-curricular
	   - extra-curricular activities
		No. of technical events in association with student chapters:
		No. of NSS Activities: 20
		No. of Innovations and Startups: NIL
		Annexure-3.8

IV. Research, Consultancy and Extension

S.No	Criterion	Observations
1.	Faculty publications in journals: Peer reviewed Journals: Thomson Reuters Impact factor Journals: Patents Publications	No. in peer reviewed journals: NIL No. in Scopus/SCI indexed journals: 07 No. in Patent Publications: 03 **Annexure-4.1**

2.	Publications in conferences:
	   - National
	   - International
		No. in Conference publications: 02
		Annexure-4.2

3.	Percentage of faculty contributing in - Research publications:	Percentage of faculty involved in research publications: 32 % (8/25)

4.	PhDs
	   - Registered
	   - Submitted
	   - Awarded
		No. registered: NIL
		No. submitted: NIL
		No. awarded: NIL
		Annexure-4.3

	PhDs guiding /guided:	No. of PhDs guiding : 11 No. of PhDs guided: 02 **Annexure-4.4**
5.	Funded R&D projects and consultancy work	Total amount of funding for R&D and consultancy projects Ongoing: NIL
6.	Incentives for faculty R&D	Incentives for faculty research publications as per HR policy

7.	MOU's with industries/ R&D/ Premier Institutes	Department executed MOU's with organizations **Annexure-4.6**
8.	Research centers of excellence Established	recognized as JNTUK research center for the academic years 2023-24 **Annexure-4.7**
9.	Skill development centers established	SIEMENS center of excellence in collaboration with APSSDC and SIEMENS

V. Infrastructure and Learning Resources

S.No	Criterio	Observations
1.	Infrastructural facilities to improve the teaching learning process Class rooms: Laboratories: e- class rooms: Seminar halls: Faculty rooms:	No. of class rooms: 11 No. of tutorial rooms: 02 No. of laboratories: 13 No. of e-Class rooms: 03 No. of seminar halls: 01 No. of faculty rooms: 13
2.	Internet facilities for faculty & Students:	Wi-Fi enabled campus
3.	Technical & administrative staff support	11 members of Lab Technician/ Programmer for supporting various Laboratories in addition to 2 members for supporting administrative activities **Annexure-5.1** (list of technicians and administrative staff with qualifications and experience)
4.	Department budget - Sanctioned amount - Amount spent - New equipment added - Maintenance of equipment and consumables registers in labs	Amount sanctioned in Rs lakhs/- Amount spent in Rs. lakhs/- New equipment added worth Rs. _____ /- Equipment and maintenance registers are maintained for all the Labs
5.	Details of computing facilities and software	Total number of Computers: 85 List of Software procured: NIL
6.	Dept News letter / magazine	Department half-yearly Newsletter is in place **Annexure-5.2**
7.	Department level library resources	Number of Titles: 211 Number of Volumes:211 Number of Journals:NIL Number of E-Journals :NIL Number of Video courses:NIL

VI. Student information, Support and Progression

S.No	Criterion	Observations
1.	Add-on courses:	List of add-on courses: 02 **Annexure-6.1**
2.	Student publications: Dept. student clubs:	No. of student publications: NIL No. of club activities for students: NIL
3.	Details of coaching provided for GATE/GRE/CRT/any other competitive exams	No. of GATE classes: NIL No. of CRT classes: 50
4.	Industrial visits and internships	No. of Industrial visits: NIL Total number of industries offering internships: 10 **Annexure-6.2**

VII. Governance, Leadership and Management

S. No	Criterion	Observations
1.	Teaching and non-teaching staff attended for skill development programs	No. of teaching staff: NIL No. of Non-Teaching staff: NIL
2.	MoUs with premier Institutions for knowledge exchange	No. of MoUs: NIL
3.	Display of Vision, Mission and other Quality objectives at prominent places	Display of Vision: Yes Display of Mission: Yes Display of PEOs, POs, PSOs and COs: Yes

4.	Staff and student attendance monitoring system
	   -Biometric
	   -Attendance registers
		Generation of Daily, Weekly and Monthly attendance reports

5.	Financial support/leaves for qualification/skill up- gradation:	Faculty members are sanctioned with Registration fees, TA and Academic leave for attending Conferences and Workshops
6.	Risk evaluation/safety measures:	Maintaining Fire extinguishers at prominent places

VIII Strengths, Weaknesses and Areas of Improvement

Strengths

(1) The involvement of faculty in research activities is found consistent.

(2) The faculties are participating in FDPs to have knowledge in recent technological advancements.

Weaknesses:

(1) There was no funded research project during this project

(2) During this period the text book publication was initiated but were few in number

Suggestions for improvement:

(1) The faculties should apply more research proposals to various funding agencies with innovative thoughts.

(2) The initiation of book publication is a good sign and it needs to be improved.

B. Sitar

Sig. of Department Coordinator

Sig. of Academic Auditors

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Sig. of HOD

Head of Department
Dept. of
Aditya Institute of
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Sig. of IQAC Coordinator
COORDINATOR, IQAC
Aditya Institute of Technology and Management
TEKKALI-532 201

Name of the Department: **ELECTRICAL AND ELECTRONICS ENGINEERING**

Academic Year : 2023-24 (IInd Semester January to June)

Date of Audit : 18.07.2024

I. COs, POs and Curriculum

S. No	Criterion	Observations
1.	COs and POs assessment	COs and POs attainment calculated as per the procedure established by PAC. **Annexure-1.1**
2.	Stakeholders feedback related to curriculum design	Graduate exit survey, alumni survey and Employer survey are conducted as per format.
3.	Action taken on minutes of BoS	Incorporated changes as per the suggestions of BoS, DAC and PAC. **Annexure-1.2** (BoS minutes and curriculum changes evidences)
4.	Percentage of lab component	10.9%(6/55) – **AR20** 22.5%(4.5/20) – **AR23** **Annexure-1.3**
5.	Evidence of academic flexibility	1 Inter disciplinary elective + 2 professional elective courses 16.36% (9/55) – **AR20** NIL – **AR23** **Annexure-1.4**

II. Faculty information and their contribution

S. No	Criterion	Observations
1.	Student Teacher ratio	STR - 19.47 **Annexure-2.1**
2.	Faculty Cadre ratio	FCR - 4 : 6 : 15 **Annexure-2.2**
3.	Faculty qualifications	13 out of 25 faculty members are doctorates,9 registered for PhD and rest of the faculty members are post graduates
4.	Faculty experience & retention	**Annexure-2.3** (list of faculty, qualifications, total experience, experience at AITAM)
5.	Faculty contribution in writing: - Books: NIL - Book chapters: 02	**Annexure-2.4**
6.	Faculty in professional bodies -Faculty contributions	**Annexure-2.5** (Memberships and activities)

7.	Faculty as resource persons in workshops / training activities	Nil

8.	International / National level events organized
	    -Conferences: NIL
	    -Workshops/ Seminars: NIL
	    -FDPs: 01
		Number of FDPs organized: 01
		
		Annexure-2.6

9.	List of conferences/seminars/ workshops/ FDP's/ any exclusive programs attended for enrichment of teaching - learning process	17 faculty members attended for FDP's Annexure-2.7

III. Teaching-Learning Process and Evaluation

S.No	Criterion	Observations

1.	Student performance
	    indices Attendance
	    Exams
		Lists of students for Detention and Condonation are maintained.
		Results analysis is carried out.
		Annexure-3.1

2.	Mechanism and activities for slow learners improvement	Slow learners are identified based on performance in Mid-exams. Conducted Make-up classes for slow learners. Annexure-3.2
3.	Student counseling /mentoring mechanism	20 students are allotted to each faculty member to mentor for continuous improvement. Annexure-3.3 (Allotment and sample file scanned)
4.	Tutorial classes	Tutorial classes are conducted as per schedule given in the time table
5.	Initiatives taken for innovative projects	No. of Innovative Projects: 02 Training programs for Faculty & Students in thrust areas Annexure-3.4 (If any)
6.	Review & Evaluation of Student Projects: - Best projects	Project review and evaluation is carried out as per PRC guidelines. Best projects are identified based on PRC recommendations. Annexure-3.5 (If any)

7.	Monitoring of Teaching-Learning Process
	  - Observation of teaching process in classrooms as per schedule
	  - Tracking of syllabus coverage
	  - Uploading of lecture notes, question papers of mid and semester end examinations in e-learning portal
	  - Verification of evaluated answer papers
	  - Checking the quality of mid examination question papers
	  - Innovative teaching methods presented
	  - Verification of course files
	  -Minutes of class committee meetings and action taken
		- Attendance registers are verified once in a month.
		- Compliance of teaching diary with lesson plan is monitored once in a month.
		- Track sheets are maintained to review syllabus coverage
		- uploading of course material, mid and semester end question papers in e-Learning Portal
		- All Mid answer scripts are verified
		- Mid question papers as per cognitive levels are verified.
		- PPT's, NPTEL video lectures are used,
		- Course files are there for all courses.
		Annexure-3.6 (Sample lesson plan, teaching diary, sample scanned copy of attendance register with signs of faculty member, HoD and Principal, syllabus coverage and number of classes track sheet, minutes of class committee meetings)

6.	Incentives for faculty R&D	Incentives for faculty research publications as per HR policy **Annexure-4.6**
7.	MOU's with industries/ R&D/ Premier Institutes	Department executed MOU's with organizations **Annexure-4.7**
8.	Research centers of excellence Established	recognized as JNTUK research center for the academic years 2023-24 **Annexure-4.8**
9.	Skill development centers established	SIEMENS center of excellence in collaboration with APSSDC and SIEMENS

V. Infrastructure and Learning Resources

S.No	Criterio	Observations
1.	Infrastructural facilities to improve the teaching learning process Class rooms: Laboratories: e- class rooms: Seminar halls: Faculty rooms:	No. of class rooms: 11 No. of tutorial rooms: 02 No. of laboratories: 13 No. of e-Class rooms: 03 No. of seminar halls: 01 No. of faculty rooms: 13
2.	Internet facilities for faculty & Students:	Wi-Fi enabled campus
3.	Technical & administrative staff support	9 members of Lab Technician/ Programmer for supporting various Laboratories in addition to 2 members for supporting administrative activities **Annexure-5.1** (list of technicians and administrative staff with qualifications and experience)
4.	Department budget - Sanctioned amount - Amount spent - New equipment added - Maintenance of equipment and consumables registers in labs	Amount sanctioned in Rs lakhs/- Amount spent in Rs. lakhs/- Equipment and maintenance registers are maintained for all the Labs
5.	Details of computing facilities and software	Total number of Computers: 85 List of Software procured: NIL
6.	Dept News letter / magazine	Department half-yearly Newsletter is in place **Annexure-5.2**
7.	Department level library resources	Number of Titles: 211 Number of Volumes: 211 Number of Journals: NIL Number of E-Journals :NIL Number of Video courses: NIL

VI. Student information, Support and Progression

S.No	Criterio	Observations
1.	Add-on courses:	List of add-on courses: 3 **Annexure-6.1**
2.	Student publications: Dept. student clubs:	No. of student publications: 15 **Annexure-6.2** (If any) No. of club activities for students: NIL
3.	Details of coaching provided for GATE/GRE/CRT/any other competitive exams	No. of GATE classes: 50 No. of CRT classes: 50
4.	Industrial visits and internships	No. of Industrial visits: 02 Total number of industries offering internships: 10 **Annexure-6.3**

8.	Training programs conducted for students - Guest lectures - Add-on courses - Seminars/workshops - Compliance of department academic calendar	No. of guest lectures: NIL No. of Add-on courses:02 No. of Seminars/workshops: NIL No major deviations are observed in the compliance of department academic calendar. **Annexure-3.7**
9.	MoUs with Industries for internship	No. of MoUs: 01 **Annexure-3.8** (If any)
10.	Students feedback and follow-up action	Online feedback is taken from the students for all courses and review is carried out.
11.	Scope for Self-learning - Certificate courses - Online courses	Monetary encouragement for certification courses
12.	Result analysis and conduct of remedial classes for students with backlogs	Result analysis is carried out after the results of semester end examinations and remedial classes are conducted for students with backlogs **Annexure-3.9** (Result analysis for all the 8 semesters and details of remedial classes)
13.	Placements (%): Industries / organizations:	Placements (%): Total 78 No. of students got selected in various companies **Annexure-3.10**
14.	Higher studies (%): Institutions:	Higher studies (%): 3 student opted for higher studies **Annexure-3.11**
15.	Student development Activities: - co-curricular - extra-curricular activities	No. of technical events in association with student chapters: No. of NSS Activities: 8 No. of Innovations and Startups: NIL **Annexure-3.12**

IV. Research, Consultancy and Extension

S.No	Criterio	Observations
1.	Faculty publications in journals: Peer reviewed Journals: Thomson Reuters Impact factor Journals: Patents Publications	No. in peer reviewed journals: No. in Scopus/SCI indexed journals: 03 No. in Patent Publications: 05
2.	Publications in conferences: - National - International	No. in Conference publications: 01 **Annexure-4.2**
3.	Percentage of faculty contributing in - Research publications:	Percentage of faculty involved in research publications: 32% (8/25)
4.	PhDs - Registered - Submitted - Awarded	No. registered: NIL No. submitted: NIL No. awarded: NIL **Annexure-4.3**
	PhDs guiding /guided:	No. of PhDs guiding : 11 No. of PhDs guided: 02 **Annexure-4.4**
5.	Funded R&D projects and consultancy work	Total amount of funding for R&D and consultancy projects Ongoing: Rs. 29 lakhs/- **Annexure-4.5**

VII. Governance, Leadership and Management

S. No	Criterion	Observations
1.	Teaching and non-teaching staff attended for skill development programs	No. of teaching staff: NIL No. of Non-Teaching staff: NIL
2.	MoUs with premier Institutions for knowledge exchange	No. of MoUs: NIL
3.	Display of Vision, Mission and other Quality objectives at prominent places	Display of Vision: Yes Display of Mission: Yes Display of PEOs, POs, PSOs and COs: Yes
4.	Staff and student attendance monitoring system -Biometric -Attendance registers	Generation of Daily, Weekly and Monthly attendance reports
5.	Financial support/leaves for qualification/skill up- gradation:	Faculty members are sanctioned with Registration fees, TA and Academic leave for attending Conferences and Workshops
6.	Risk evaluation/safety measures:	Maintaining Fire extinguishers at prominent places

VIII Strengths, Weaknesses and Areas of Improvement

Strengths

(1) Two funded Project of worth ₹29 lakhs have been sanctioned under the MSME scheme.

(2) The student Publications were improved.

(3) The students contributed innovative Projects.

Weaknesses:

(1) Few students are persuing higher studies in reputed universities.

(2) During this period no guest lecturers have been conducted for the students.

Suggestions for improvement:

(1) Steps should be taken to train and motivate the students to persue higher studies.

(2) The guest lecturers should be conducted in both the semesters.

B. Sriker

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