Department of ECE

Academic Audit Report

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT- TEKKALI
INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AUDIT REPORT

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

Academic Year   : 2018-19 I Semester (July to December)

Date of Audit   : 24-01-2019

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** (BOS minutes and curriculum changes evidences)
4.	Percentage of lab component	27.14%(19/70)- **AR13** 28.76%(21/73) – **AR16** 28.78%(19/66) – **AR18** -Two additional experiments are conducted in all Labs
5.	Evidence of academic flexibility	1 open elective + 4 core elective courses 7.14% (5/70) - **AR13** 5 open elective + 3 core elective courses 10.95% (8/73) – **AR16** 12.12%(8/66)- **AR18**

II. Faculty information and their contribution

S.	Criterion	Observations
1.	Student Teacher ratio	STR - 1:17.32
2.	Faculty Cadre ratio	FCR - : Professors- 5 Associate Professors- 12 Assistant Professors-23
3.	Faculty qualifications	6 out of 40 faculty members are doctorates,3 submitted their theses, 18 registered for Ph.D and rest of the faculty members are post graduates
4.	Faculty experience & retention	**Annexure-2.1** (list of faculty, qualifications, total experience, experience at AITAM)
5.	Faculty contribution in writing: - Books: - Book chapters:	Nil (if any) **Annexure-2.2**
6.	Faculty in professional bodies -Faculty contributions	(Memberships and activities) **Annexure-2.3**

7.	Faculty as resource persons in workshops / training activities	Nil (If any) **Annexure-2.4**

8.	International / National level events organized
	   -Conferences:
	   -Workshops/ Seminars:
	   -FDPs:
		Number of events organized: 1(Conference)
		
		Number of FDPs/Guest Lectures/Seminars organized:Nil **Annexure-2.5**

9.	List of conferences/seminars/ workshops/ FDP's/ any exclusive programs attended for enrichment of teaching - learning process	10- faculty members attended **Annexure-2.6**

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. Detained students-1 Condonation students-119 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.	Initiatives taken for innovative projects	No. of Innovative Projects:10 Training programs for students in thrust areas: Embedded System Design, Basics of Python **Annexure-3.4** (If any)
5.	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. 4 **Annexure-3.5** (If any)

6.	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)

7.	Training programs conducted for students
	  - Guest lectures
	  - Add-on courses
	  - Seminars/workshops
	  - Compliance of department academic calendar
		No. of guest lectures:10
		No. of Add-on courses:14
		No. of Seminars/workshops:Nil
		
		No major deviations are observed in the compliance of department academic calendar.
		Annexure-3.7

8.	MoUs with Industries for internship	No. of MoUs:**32** **Annexure-3.8**
9.	Students feedback and follow-up action	Online feedback is taken from the students for all courses and review is carried out.

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

11.	Result analysis and conduct of remedial classes for students with backlogs	Result analysis is carried out after the results of semester end examinations and make-up classes are conducted for students with backlogs **Annexure-3.9** (Result analysis for all the 8 semesters and details of remedial classes)
12.	Placements (%): Industries / organizations:	Placements(%): 74.1% Total _126___ No. of students got selected in various companies **Annexure-3.10**
13.	Higher studies (%): Institutions:	Higher studies(%):0 ___Nil___ students joined for PG programme in various institutes **Annexure-3.11**

14.	Student development Activities:
	  - co-curricular
	  - extra-curricular activities
		No. of technical events in association with student chapters:
		No. of NSS Activities;
		No. of Innovations and Startup: **Annexure-3.12**

IV. Research, Consultancy and Extension

S.No	Criterion	Observations
1.	Faculty publications in journals: Peer reviewed Journals: Thomson Reuters Impact factor Journals:	No. in peer reviewed journals:19 No. in Scopus/SCI indexed journals:14 **Annexure-4.1**

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

3.	Percentage of faculty contributing in - Research publications:	Percentage of faculty involved in research publications: 85%

4.	PhDs
	  - Registered
	  - Submitted
	  - Awarded
		No. registered:12
		No. submitted: 1
		No. awarded:1
		Annexure-4.3

	PhDs guiding /guided:	No. of PhDs guiding : 2 No. of PhDs guided: 0 **Annexure-4.4**

5.	Funded R&D projects and consultancy work	Total amount of funding for R&D and consultancy projects
		    Ongoing: Rs._____/-
		    Completed: Rs.____99,800_____/-
		Annexure-4.5

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	**32 (Annexure-4.7)**
8.	Research centers of excellence Established	recognized as JNTUK research center for the academic years 2017-18 , 2018-19
9.	Skill development centers established	APSSDC is available in the college

V. Infrastructure and Learning Resources

S.No	Criterion	Observations
1.	Infrastructural facilities to improve the teaching learning process Class rooms: Laboratories: e- class rooms: Seminar halls: Faculty rooms:	No. of class rooms: 13 No. of tutorial rooms:3 No. of laboratories:11 No. of e-Class rooms:2 No. of seminar halls:1 No. of faculty rooms: 22
2.	Internet facilities for faculty & Students:	Wi-Fi enabled campus
3.	Technical & administrative staff support	9 members of Lab Technician/ Jr.Technician for supporting various Laboratories in addition to 5 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. _7150000_____ /- Amount spent in Rs. _6935000_____ /- New equipment added worth Rs. _720000_____ /- Equipment and maintenance registers are maintained for all the Labs
5.	Details of computing facilities and software	Total number of Computers: 191 List of Software procured:HFSS(Rs/-7,20,000)
6.	Dept News letter / magazine	Department half-yearly Newsletter is in place **Annexure-5.2**
7.	Department level library resources	Number of Titles:262 Number of Volumes:262 Number of Journals: Number of E-Journals: Number of Video courses:

VI. Student information, Support and Progression

S.No	Criterion	Observations
1.	Add-on courses:	List of add-on courses:14 **Annexure-6.1**
2.	Student publications: Dept. student clubs:	No. of student publications: Nil (If any) **Annexure-6.2** No. of club activities for students: Nil **Annexure-6.3**
3	Details of Coaching provided for GATE / GRE / CRT / any other competitive exams	No. of GATE classes: Nil No. of CRT classes: 45

S. No	Criterion	Observations
4.	Industrial visits and internships	No. of Industrial visits: Total number of industries offering internships:32 **Annexure-6.4**

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 **Annexure-7.1** (If any)
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 **Annexure-7.2**
6.	Risk evaluation/safety measures:	Maintaining Fire extinguishers at prominent places

VIII Strengths, Weaknesses and Areas of Improvement

Strengths

(1) More number of Doctorates

(2) More number of faculties is registered for Ph.D.

(3) Research publications are more

(4) Recognized as JNTUK research center for the academic years 2017-18 & 2018-19

Weaknesses:

(1) Consultancy

(2) Funded projects

(3) Books and Book Chapters

Suggestions for improvement:

1. Need to increase the amount for consultancy
2. Need to get more number of funded projects
3. Need to publish the books

Sig. of Department Coordinator K-Ch   Sig. of Academic Auditors   1.

2.

D.

Sig. of HOD   **Sig. of IQAC Coordinator**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT- TEKKALI
INTERNAL QUALITY ASSURANCE CELL
ACADEMIC AUDIT REPORT

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

Academic Year   : 2018-19 II Semester (January to June)

Date of Audit   : 14-07-2019

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** (BoS minutes and curriculum changes evidences)
4.	Percentage of lab component	27.14%(19/70)- **AR13** 28.76%(21/73) – **AR16** 28.78%(19/66) – **AR18** -Two additional experiments are conducted in all Labs
5.	Evidence of academic flexibility	1 open elective + 4 core elective courses 7.14% (5/70) - **AR13** 5 open elective + 3 core elective courses 10.95% (8/73) – **AR16** 12.12%(8/66)- **AR18**

II. Faculty information and their contribution

S.	Criterion	Observations
1.	Student Teacher ratio	STR - 1:17.32
2.	Faculty Cadre ratio	FCR - : : Professors- 7 Associate Professors- 10 Assistant Professors-18
3.	Faculty qualifications	10 out of 35 faculty members are doctorates, 3 submitted their theses, 18 registered for Ph.D and rest of the faculty members are post graduates
4.	Faculty experience & retention	**Annexure-2.1** (list of faculty, qualifications, total experience, experience at AITAM)
5.	Faculty contribution in writing: - Books: - Book chapters:	Nil (if any) **Annexure-2.2**
6.	Faculty in professional bodies -Faculty contributions	(Memberships and activities) **Annexure-2.3**

7.	Faculty as resource persons in workshops / training activities	Nil (If any) **Annexure-2.4**

8.	International / National level events organized
	    -Conferences:
	    -Workshops/ Seminars:
	    -FDPs:
		Number of events organized:2
		
		Number of FDPs organized:2
		
		Annexure-2.5

9.	List of conferences/seminars/ workshops/ FDP's/ any exclusive programs attended for enrichment of teaching - learning process	19 faculty members attended **Annexure-2.6**

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.
		Detained students- 7
		Condonation students-104
		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.	Initiatives taken for innovative projects	No. of Innovative Projects: Training programs for students in thrust areas **Annexure-3.4** (If any)
5.	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)
6.	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)

7.	Training programs conducted for students - Guest lectures - Add-on courses - Seminars/workshops - Compliance of department academic calendar	No. of guest lecturers: 10 No. of Add-on courses: 14 No. of Seminars/workshops: Nil No major deviations are observed in the compliance of department academic calendar. **Annexure-3.7**
8.	MoUs with Industries for internship	No. of MoUs:**32** **Annexure-3.8**
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13.	Higher studies (%): Institutions:	Higher studies(%):0 ___0____ students joined for PG programme in various institutes **Annexure-3.11**
14.	Student development Activities: - co-curricular - extra-curricular activities	No. of technical events in association with student chapters: No. of NSS Activities: No. of Innovations and Startups: **Annexure-3.12**

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S.No	Criterion	Observations
1.	Faculty publications in journals: Peer reviewed Journals: Thomson Reuters Impact factor Journals:	No. in peer reviewed journals:19 No. in Scopus/SCI indexed journals:11 **Annexure-4.1**
2.	Publications in conferences: - National - International	No. in Conference publications:3 **Annexure-4.2**
3.	Percentage of faculty contributing in - Research publications:	Percentage of faculty involved in research publications: 90%
4.	PhDs - Registered - Submitted - Awarded	No. registered:12 No. submitted: 2 No. awarded:2 **Annexure-4.3**
	PhDs guiding /guided:	No. of PhDs guiding : 6 No. of PhDs guided: 0 **Annexure-4.4**

5.	Funded R&D projects and consultancy work	Total amount of funding for R&D and consultancy projects Ongoing: Rs._____/- Completed: Rs.__99,800_____ /- **Annexure-4.5**
6.	Incentives for faculty R&D	Incentives for faculty research publications as per HR policy **Annexure-4.6**
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2.	Internet facilities for faculty & Students:	Wi-Fi enabled campus
3.	Technical & administrative staff support	10 members of Lab Technician/ Jr. Mechanic for supporting various Laboratories in addition to 4 members for supporting administrative activities **Annexure-5.1** (list of technicians and administrative staff with qualifications and experience)
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5.	Details of computing facilities and software	Total number of Computers: 191 List of Software procured: HFSS(Rs/-7,20,000)
6.	Dept News letter / magazine	Department half-yearly Newsletter is in place **Annexure-5.2**
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2.	Student publications: Dept. student clubs:	No. of student publications:Nil (If any) **Annexure-6.2** No. of club activities for students:Nil **Annexure-6.3**

3.	Details of coaching provided for GATE/GRE/CRT/any other competitive exams	No. of GATE classes: Nil No. of CRT classes:45
4.	Industrial visits and internships	Total number of industries offering internships:32 **Annexure-6.4**

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: **Annexure-7.1** (If any)
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 **Annexure-7.2**
6.	Risk evaluation/safety measures:	Maintaining Fire extinguishers at prominent places

VIII Strengths, Weaknesses and Areas of Improvement

Strengths

(1) More number of Doctorates

(2) More number of faculties is registered for Ph.D.

(3) Research publications are more

(4) Recognized as JNTUK research center for the academic years 2017-18 & 2018-19

Weaknesses:

(1) Consultancy

(2) Funded projects

(3) Books and Book Chapters

Suggestions for improvement:

1. Need to increase the Consultancy amount
2. Need to publish the books.
3. Need to get funded projects.

Sig. of Department Coordinator   Sig. of Academic Auditors

  1.

  2.

D.

Sig. of HOD

Sig. of IQAC Coordinator