INTERNAL QUALITY ASSURANCE CELL

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT- TEKKALI

ACADEMIC AUDIT REPORT

Name of the Department: **COMPUTER SCIENCE AND ENGINEERING**

Academic Year : 2021-22 I Semester (July to Dec)

Date of Audit : 20-01-22

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	37.31%(25/67)– **AR-18** -Three additional experiments are conducted in all Labs. 41.66%(15/36)- **AR-20** **Annexure-1.2**
5.	Evidence of academic flexibility	01 open elective + 6 core elective courses 14.92% (10/67) – **AR18** 01 open elective 2.7% (01/36) – **AR20**

II. Faculty information and their contribution

S. No	Criterion	Observations
1.	Student Teacher ratio	STR - 19.00
2.	Faculty Cadre ratio	FCR – 3:8:25
3.	Faculty qualifications	12 out of 35 faculty members are doctorates, 12 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:03 - Book chapters: Nil	**Annexure-2.2**
6.	Faculty in professional bodies -Faculty contributions	**Annexure-2.3** (Memberships and activities)

7.	Faculty as resource persons in workshops / training activities	Nil
8.	International / National level events organized -Conferences:01 -Workshops/ Seminars:NIL -FDPs:01	Number of events organized: 02 Number of FDPs/Guest Lectures/Seminars organized:02 **Annexure-2.4**
9.	List of conferences/seminars/ workshops/ FDP's/ any exclusive programs attended for enrichment of teaching - learning process	23 faculty members attended **Annexure-2.5**

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.
3.	Student counseling /mentoring mechanism	20 students are allotted to each faculty member to mentor for continuous improvement. **Annexure-3.2 (Allotment and sample file scanned)**
4.	Initiatives taken for innovative projects	Nil
5.	Review & Evaluation of Student Projects: - Best projects	Nil
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-3.3 (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 : 02 No. of Add-on courses: Nil No. of Seminars/workshops:03 No major deviations are observed in the compliance of department academic calendar. **Annexure-3.4**
8.	MoUs with Industries for internship	No. of MoUs:09 **Annexure-3.5** (If any)
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 remedial classes are conducted for students with backlogs **Annexure-3.6** (Result analysis for all the 8 semesters and details of remedial classes)
12.	Placements (%): Industries / organizations:	Placements (%): Total 306 No. of students got selected in various companies **Annexure-3.7**
13.	Higher studies (%): Institutions:	01 students joined for PG programme in institute **Annexure-3.8**
14.	Student development Activities: - co-curricular - extra-curricular activities	No. of technical events in association with student chapters: Nil No. of NSS Activities: 6 No. of Innovations and Startups: Nil **Annexure-3.9**

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:01 No. in Scopus/SCI indexed journals:04 **Annexure-4.1**
2.	Publications in conferences: - National - International	No. in Conference publications :5 **Annexure-4.2**
3.	Percentage of faculty contributing in - Research publications:	Percentage of faculty involved in research publications: 14.2% (5/35)
4.	PhDs - Registered - Submitted - Awarded	No. registered :05 No. submitted: Nil No. awarded :01 **Annexure-4.3**
	PhDs guiding /guided:	No. of PhDs guiding :02 No. of PhDs guided: NIL **Annexure-4.4**

5.	Funded consultancy work	3,00,000/- **Annexure-4.5**
6.	Incentives for faculty R&D	Nil
7.	MOU's with industries/ R&D/ Premier Institutes	Department executed MOU's with two organizations **Annexure-4.6**
8.	Research centers of excellence Established	NIL
9.	Skill development centers established	SIEMENS center of excellence in collaboration with APSSDC and SIEMENS

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: 11 No. of tutorial rooms:03 No. of laboratories:05 No. of e-Class rooms:03 No. of seminar halls:01 No. of faculty rooms: 20
2.	Internet facilities for faculty & Students:	Wi-Fi enabled campus
3.	Technical & administrative staff support	04 members of Lab Technician for supporting various Laboratories in addition to 9 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. Amount spent in Rs. New equipment added worth Rs. Equipment and maintenance registers are maintained for all the Labs:Yes
5.	Details of computing facilities and software	Total number of Computers: 243 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: 187 Number of Volumes: 359 Number of Journals: 31 Number of E-Journals :05 Number of Video courses: NIL

VI. Student information, Support and Progression

S.No	Criterion	Observations
1.	Add-on courses:	List of add-on courses: Nil

2.	Student publications:NIL Dept. student clubs:03	No. of student publications: Nil No. of club activities for students:04 **Annexure-6.1**
3.	Details of coaching provided for GATE/GRE/CRT/any other competitive exams	No. of CRT classes:100
4.	Industrial visits and internships	Nil

VII. Governance, Leadership and Management

S. No	Criterion	Observations
1.	Teaching and non-teaching staff attended for skill development programs	No. of teaching staff: 02 No. of Non-Teaching staff:NIL **Annexure-7.1**
2.	MoUs with premier Institutions for knowledge exchange	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:	Nil
6.	Risk evaluation/safety measures:	Maintaining Fire extinguishers at prominent places

VIII Strengths, Weaknesses and Areas of Improvement

Strengths:
1. The number of faculty members pursuing a PhD has increased.
2. The quality of paper and book publishing has improved.
3. Faculty skill enhancement initiatives have improved.

Weaknesses:
1. The number of students pursuing higher education is less.
2. There are no innovative ideas.

Suggestions for improvement:
1. Students should be encouraged to register in online certification programs.

Sig. of Department Coordinator

Head, Dept. of CSE
Aditya Institute of
Sig. of HOD
Technology & Management
Tekkali-532 201, (A.P.)

Sig. of Academic Auditors

1.
2. (Dr D. Sravanthi)

Sig. COORDINATOR, IQAC
Aditya Institute of Technology and Management
TEKKALI-532 201

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT- TEKKALI

ACADEMIC AUDIT REPORT

Name of the Department: **COMPUTER SCIENCE AND ENGINEERING**

Academic Year   : 2021-22 II Semester (Jan-22 to June-22)

Date of Audit   : 12-07-2022

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 evidences)**
4.	Percentage of lab component	39.72% (14.5/36.5) – **AR18** 34.16% (14/41)– **AR-20** **Annexure-1.2(course structure)** -Two additional experiments are conducted in all Labs
5.	Evidence of academic flexibility	open elective + core elective courses 30.13% (11/36.5) – **AR18** open elective + core elective courses 13.95% (3/21.5) – **AR20**

II. Faculty information and their contribution

S. No	Criterion	Observations
1.	Student Teacher ratio	STR - 16.59
2.	Faculty Cadre ratio	FCR - 3: 9 : 29
3.	Faculty qualifications	-11 out of 41 faculty members are doctorates, -11 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:	-Books: Nil -Book chapters: Nil
6.	Faculty in professional bodies -Faculty contributions	**Annexure-2.2 (Memberships and activities)** -CSI,ISTE

	Faculty as resource persons in workshops / training activities	-Nil
8.	International / National level events organized -Conferences: -Workshops/ Seminars: -FDPs:	Number of events organized: -Conferences: Nil -Workshops/ Seminars: Nil -FDPs: Nil -Guest Lectures/Seminars organized: 04 **Annexure-2.3**
9.	List of conferences/seminars/ workshops/ FDP's/ any exclusive programs attended for enrichment of teaching-learning process	-Faculty members attended: 17 Conferences attended: 05 **Annexure-2.4** / 4. 2

III. Teaching-Learning Process and Evaluation

S.No	Criterion	Observations
1.	Student performance indices - -Attendance -Exams	Lists of students for Detention and Condination 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.
3.	Student counseling /mentoring mechanism	20 students are allotted to each faculty member to mentor for continuous improvement. **Annexure-3.2** (Allotment and sample file scanned)
4.	Initiatives taken for innovative projects	-Nil
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-3.3**
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-3.4** (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)

	Training programs conducted for students
	  - Guest lectures
	  - Add-on courses
	  - Seminars/workshops
	  - Compliance of department academic calendar
		No. of guest lectures: 04
		No. of Add-on courses: 07
		No. of Seminars/workshops: Nil
		
		No major deviations are observed in the compliance of department academic calendar.
		Annexure-3.5 / 2.3/6.1

8.	MoUs with Industries for internship	No. of MoUs: 07 **Annexure-3.6**
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
		-NPTEL
		-Online 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 remedial classes are conducted for students with backlogs **Annexure-3.7** (Result analysis for all the 8 semesters and details of remedial classes)
12.	Placements (%): Industries / organizations:	Placements (%): 83.33% Total 150 No. of students got selected in various companies **Annexure-3.8**
13.	Higher studies (%): Institutions:	3.96% (8/202) **Annexure-3.9**

14.	Student development Activities:
	  - co-curricular
	  - extra-curricular activities
		No. of technical events in association with student chapters: Nil
		No. of NSS Activities: 09
		No. of Innovations and Startups: Nil
		Annexure-3.10

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: 02 No. in Scopus/SCI indexed journals: 07 **Annexure-4.1**

2.	Publications in conferences:
	  - National
	  - International
		No. in Conference publications: 05
		Annexure-4.2

3.	Percentage of faculty contributing in - Research publications:	Percentage of faculty involved in research publications: 36.58% (15/41)

4.	PhDs
	  - Registered
	  - Submitted
	  - Awarded
		No. registered :11
		No. submitted: Nil
		No. awarded :Nil
		Annexure-4.3

	PhDs guiding /guided:	No. of PhDs guiding :Nil No. of PhDs guided: Nil
5.	Funded consultancy work	-Nil
6.	Incentives for faculty R&D	-Nil
7.	MOU's with industries/ R&D/ Premier Institutes	Department executed MOU's with 07 organizations **Annexure-4.4** / 3.6
8.	Research centers of excellence Established	DST-FIST Lab

	Skill development centers established	SIEMENS center of excellence in collaboration with APSSDC and SIEMENS

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: 12 No. of tutorial rooms:03 No. of laboratories:05 No. of e-Class rooms:02 No. of seminar halls:01 No. of faculty rooms: 20
2.	Internet facilities for faculty & Students:	Wi-Fi enabled campus
3.	Technical & administrative staff support	04 members of Lab Technician for supporting various Laboratories in addition to 9 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: 31400000.00 Amount spent in Rs: 31330112.00 New equipment added worth Rs. 00.00 Equipment and maintenance registers are maintained for all the Labs: Yes **Annexure-5.2**
5.	Details of computing facilities and software	Total number of Computers: 232 List of Software procured: NIL
6.	Dept News letter / magazine	Department half-yearly Newsletter is in place **Annexure-5.3**
7.	Department level library resources	Number of Titles: 189 Number of Volumes: 291 Number of Books: 163 Number of Journals: 31 Number of E-Journals :05

VI. Student information, Support and Progression

S.No	Criterion	Observations
1.	Add-on courses:	List of add-on courses: 07 **Annexure-6.1** / 3.5
2.	Student publications: Dept. student clubs:	No. of student publications: 09 No. of club activities for students: 04 **Annexure-6.2**
3.	Details of coaching provided for GATE/ GRE/CRT/any other competitive exams	No. of CRT classes:100
4.	Industrial visits and internships	-Students visited 13 companies for internships. **Annexure-6.3**

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

	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:	-Nil
6.	Risk evaluation/safety measures:	Maintaining Fire extinguishers at prominent places.

VIII Strengths, Weaknesses and Areas of Improvement

Strengths:
- Faculty retention is high. Faculty members acted as conference Session chair. High quality faculty having expertise in modern cs fields.
- Strong ties with the industry for internships, placements, and MOU's to apply their skills for community development
- Good number of placements, with graduates selected in top MNC Companies.

Weaknesses:
- No good number of books and book chapters writing by the faculty.
- Industry oriented activities for student and labs are not very high.
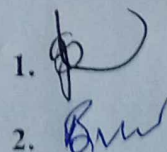- Organised very few international seminars and conferences.

Suggestions for improvement:
- Encourage faculty members to participate/join in emerging technology courses.
- Increase collaborative research/projects among the faculty member.
- Initiate faculty to write good number of books and book chapters.

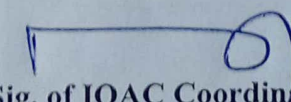Sig. of Department Coordinator:

Sig. of Academic Auditors 1.

2.

Sig. of HOD:

Head Dept. of CSE
Aditya Institute of
Technology & Management
Tekkali-532 201, (A.P.)

Sig. of IQAC Coordinator:

COORDINATOR, IQAC
Aditya Institute of Technology and Management
TEKKALI-532 201