

6.5.2. DOCUMENTS PERTAINED TO QUALITY ASSURANCE INITIATIVES

2. Academic Administrative Audit (AAA) and follow up action taken

I. Academic Year 2019-2020

i) External Academic Audit from 07.03.2020 to 29.06.2020



REGISTRAR
Karpagam Academy of Higher Education
(Deemed to be University Under Section 3 of UGC Act 1956)
Pollachi Main Road, Eachanari Post,
Coimbatore - 641 021.



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Academic Audit is a tool for examining and enhancing the quality of academic aspects of Higher Education Institutions. It is a mechanism to examine and enhance the quality of academic aspects of institutes of Higher Education. Usually it is systematic and scientific process. It lays emphasis on the designing, implementing, monitoring and reviewing the quality of services provided by the academic institutions. It aims at reviewing the performance of the academic inputs with respect to quality assurance.

Internal audit is an in-house operation for self-introspection. NAAC has suggested institutions to establish Internal Quality Assurance Cell (IQAC) as the internal agency for quality assurance. The task of self-introspection and preparing self-study report is assigned to IQAC. Hence, IQAC in every institution needs to play the role of internal academic auditing agency. Therefore the role of IQAC in the process of self-assessment i. e. one type of academic audit is vital.

Further it was understood that Academic Audit (AA) is a method of assessing the efficiency and effectiveness of the operating system of the administrative procedures, policies, decision making authorities and functionaries, strategies, process, feedback, control mechanism and so on. The AA would certainly make the functionaries to ascertain the strength and weakness of the operating system in general and pin out the areas in particular, and to ascertain where the function is stagnated and affected, and where special attention is required along with man and material resources.”

The Need for Academic Audit:

The Academic Audit is needed for following:

- 1) To confirm that the arrangements for quality assurance are fit for purpose and conform to the institution's vision and mission.
- 2) To provide assurance that the standards of higher education align with expectations.
- 3) To ensure that students have access to appropriate learning opportunities through taught provision and supported learning.
- 4) To promote and enhance high quality teaching and learning.
- 5) To confirm that students are fully supported in their academic and personal development.
- 6) To advance the highest possible levels of student achievement.
- 7) To encourage strategic developments that enriches the curriculum and enhances students' opportunities for employment and career development.

Major objectives of Academic Audit:

1. To understand the existing system in KAHE and assess the strengths and weaknesses of the Departments and to suggest the methods for improvement for overcoming the weaknesses.

2. To identify the bottlenecks in the existing mechanisms and to identify the opportunities for academic reforms.
3. To evaluate the optimum utilization of resources.
4. To suggest the methods for continuous improvement of quality keeping in mind criteria and reports by NAAC and other bodies.
5. To Monitor Teaching and learning process in KAHE

IQAC organised an Academic and Administrative Audit (AAA) for the Academic year 2019-2020 between 07.03.2020 to 29.06.2020 for all the Departments of KAHE.

The list of external experts who have been appointed to perform the AAA is as follows:

S.No	Department audited	Date of Audit	Name/Address of the external Expert
1	Biochemistry	14.03.2020	Dr.J.Angayarkanni, Professor, Department of Microbiology, Bharathiar University, Coimbatore
2	Biotechnology	14.03.2020	Dr.J.Angayarkanni, Professor, Department of Microbiology, Bharathiar University, Coimbatore
3	Chemistry	14.03.2020	Dr.R.Nandhakumar, Associate Professor, Department of Chemistry, Karunya Institute of Technology, Coimbatore
4	Computer Science & Computer Application	26.06.2020	G.Padmavathi, Professor, Department of Computer Science, Avinashilingam Institute for Home Science and Higher Education for Women.Univeraity, Coimbatore
5	Electronics and Communication Systems	14.03.2020	Dr.S.Kalamani, Professor of English, Aviniashilingam Institute for Home Science and Higher Education for Women, Coimbatore
6	Mathematics	14.03.2020	Dr.R.Nandhakumar, Associate Professor, Department of Chemistry, Karunya Institute of Technology, Coimbatore
7	Microbiology	16.03.2020	Dr.J.Angayarkanni, Professor, Department of Microbiology, Bharathiar University, Coimbatore
8	Physics	14.03.2020	Dr.R.Nandhakumar, Associate Professor, Department of Chemistry, Karunya Institute of Technology, Coimbatore
9	Automobile Engineering	14.03.2020	Dr.K. Soorya Prakash, Assistant Professor,

			Anna University Regional Campus,Coimbatore
10	Biomedical Engineering	14.03.2020	Dr.A.Soundarajan, Professor, Department of Electrical and Electronics Engineering, PSG College of Technology, Coimbatore
11	Biotech (FoE)	13.03.2020	Dr.C. Meiraj, Associate Professor, Department of Civil Engineering, Government College of Technology, Coimbatore
12	Chemical Engineering	17.03.2020	Dr.C. Meiraj, Associate Professor, Department of Civil Engineering, Government College of Technology, Coimbatore
13	Civil Engineering	13.03.2020	Dr.C. Meiraj, Associate Professor, Department of Civil Engineering, Government College of Technology, Coimbatore
14	Computer Science & Engineering	07.03.2020	Dr.M.Abdul Rahiman, Managing Director, Kerala State Centre for Advanced Printing and Training, Trivandrum
15	Electronics and Communication Engineering	14.03.2020	Dr.A.Soundarajan, Professor, Department of Electrical and Electronics Engineering, PSG College of Technology, Coimbatore
16	Electrical & Electronics Engineering	14.03.2020	Dr.A.Soundarajan, Professor, Department of Electrical and Electronics Engineering, PSG College of Technology, Coimbatore
17	Food Technology	13.03.2020	Dr.C. Meiraj, Associate Professor, Department of Civil Engineering, Government College of Technology, Coimbatore
18	Mechanical Engineering	14.03.2020	Dr.K. Soorya Prakash, Assistant Professor, Anna University Regional Campus,Coimbatore
19	Science & Humanities	07.03.2020	Dr.M.Abdul Rahiman, Managing Director, Kerala State Centre for Advanced Printing and Training, Trivandrum
20	Architecture	17.03.2020	Ar.N.Kirubashankar, HoD-Ranganathan, School of

			Architecture of Architecture ,Coimbatore
21	Pharmacy	29.06.2020	Dr.S.Mohan, Principal, Karpagam College of Pharmacy, Coimbatore

This audit was focused on the academic performance of the departments covering all the activities. The following were taken as the audit criteria.

- i) Curricular Aspects
- ii) Teaching, Learning & Evaluation
- iii) Research, Innovations & Activities
- iv) Infrastructure & Learning Resources
- v) Student Support & Progression
- vi) Governance, Leadership & Management
- vii) Institution Values & Best Practices

Follow up action taken by the Departments

S.No	Department audited	Comments by the Auditor	Follow up action
1	Biochemistry	All the relevant documents are available	It also will be updated in daily basis
		The presentation of document under each questions need to be tabulated and presented for easy verification.	The work has been completed
2	Biotechnology	All the documents for most of the Criteria have been well maintained. Year wise tabulation of documents has to be done for ready reference.	The suggested comments have been carried out in all documents for ready reference.
3	Chemistry	To apply for funding by sending project proposal.	Project proposals will be sent to DST
		Research publication	The quality and quantity of the publication will be increased
		Patents and commercialisation	Patent proposals will be made
		Automation of course files	Will be Discussed with the automation Coordinator
		Research facilities (Major Equipments)	Facilities will be improved in the laboratories
		New programs to be offered.	Will be taken out in the forthcoming Board of Studies.
4	Computer Science & Computer Application	Flexibility in curriculum , adoption of LOCF at UG/PG level	UGC Curriculum framework followed Choice Based Credit System

			Syllabus framed ensures students for global competitiveness Curriculum is designed in such a way that graduate attributes are attained.
		Students centric learning methods of teaching at course level	Student centric teaching methods like Group Discussion, Role Play and Problem Based Learning are practised.
		Promotion of technology enhanced learning through online course preparation for SWAYAM platform , creation of technical resources.	Internet Facility, Wi-Fi facility for students , Extra Lab Sessions for online course preparation are available
		Industry linkages for student support and skill enhancement	MoU with CDAC Pune, CDAC Thiruvananthapuram. are already in place. Also, industry Collaboration with TCS, Oracle through ICT, Accent Technosoft, Altitudes was made.
		Faculty tie-up with R & D and international organizations, institutions for research , development and consultancy for global exposure	To be done in the forth coming semester
		Identification / focus on best practices, vision, mission, goals of the department	Collaboration with International Universities, Create Centre of Excellence in thrust areas of Computer Science, to create Open Source Projects for Public Utility, Making Journal of Computer Science to include in UGC Care List are the various focus areas identified.
5	Electronics and Communication Systems	Projects proposal could be sent and to have patent rights	Since there was no admission from the academic year 2017-2018 the available staff members are sufficient to handle the workload of the department.
		Department to be Strengthened with additional staff	

			At present there was no projects to apply for patent rights
6	Mathematics	Publications	Number of Publications are increased for this academic year. This will increase in future because Faculty Members with Ph.D increased.
		Patents	We will plan in future.
		Fundings	We are in the process of writing proposal.
		MoU's	One MoU signed and we are planning one more for the academic year 2020-2021.
		New programmes	We are not planning in the near future.
		Students to clear competitive exam	Students are undergoing coaching for the competitive exam.
		To conduct Workshop / Conferences / Seminars.	Two webinars are conducted, Four more are planned for the academic year 2020-2021.
7	Microbiology	The document have been maintained	Maintained as per planned NAAC file number
		The Cataloguing of document year wise need to be done for easy reference and verification	Catalogued all the document year wise
		Some features like collaborative research need to be addressed more.	Communication started to initiate collaborative research with Kerala veterinary and animal Sciences University, Mannuthy, Kerala.
8	Physics	Funded projects	3 DST Project submitted. Will be increased in the upcoming years.
		Good Quality Papers	4 nos journals are published faculties are encouraged to publish in WoS.
		Interdisciplinary Research	Faculties are actively collaborated with interdisciplinary Research with various institutions and start-ups.
		Complete Automation of Course Files	Course files are automated.
		Commercialisation of Patents	Start up and Patent filing are motivated.

		Practical Problems oriented Curriculum	Curriculum has been updated with the current state of art industry need and problem oriented.
		Industry connect	Industry Collaboration and In-Plant training are planned
9	Automobile Engineering	Advanced Research laboratories have to be set up so as to enable the faculty to file patents / improvise consultancy	It is planned to have dry sand abrasion tester and rotating beam fatigue tester which can be added in the existing Leonardo research centre for tribology
		Advanced Software to enrich testing facilities may be created.	It is planned to have MATLAB software which enables automotive engineering to accelerate vehicle development processes regarding safety, comfort, fuel economy, and performance.
10	Biomedical Engineering	For Value added course conducted, a performance analysis to be done	Test and Feedback analysis to be carried out. Specific Suggestions will given for further improvement
		Slow learners follow for improvement	Before and After CIA test, Special coaching classes will be scheduled.
		Consultancy and Extension activity to be improved	Hospitals and Healthcare Industries are approached for problem definition. Two out reach activity is planned.1. Health check up camps 2.Personal Hygiene Awareness camp
		Faculty / student publication to be improved	All the final year students are requested to publish an article. Faculty members are directed to publish in Scopus/Web of science.
		Collaborative research to be initiated	Faculty research expertise will be shared with other departments and common research problem will be identified to initiate collaborative work.
11	Biotech (Faculty of Engineering)	The overall arrangement of the Academic audit file for the department of	The existing practice will be sustained .

		Biotechnology was neat and good.	
		It was observed that more students – centric method have been followed.	Student centric methods are helpful to keep them engaged, and the learning process is enhanced due to improved interaction by students. All faculty will follow the same in the upcoming semesters.
		The research activities and publication of research papers has to be improved.	i)Planning to improve collaborative research ii)Create positive research culture among the students Improve research infrastructure by purchasing additional equipment.
		More no of faculty members have attended NPTEL courses.	Each faculty will enrol NPTEL courses
		Best practices may be included in the forthcoming events.	i)Social initiative by students ii) Department level Best outgoing students awards are being provided each year to motivate them further and this practice will ultimately motivates the juniors. We will continue the same for the next semester as well.
12	Chemical Engineering	The files for the Academic Audit for the Chemical Engineering Department was presented neatly.	All the files will be updated for the upcoming semester
		All the Curricular Aspects and Teaching, learning and Evaluation process are implemented	Feedback Analysis will be updated for the upcoming semester
		The Research activities and the projects works are to be included in the forthcoming year	The final year project works will be updated in upcoming semester
		One MoU is planned during this academic year	Planned to Approach various industries
		Since the Department was started during the year 2016, the outcome of the students were to be measured after the year.	The outcome will be updated in the coming semester
		Best Practices to be identified.	Planned for production of commercial products in the upcoming semester

13	Civil Engineering	The arrangement of file for academic audit was good.	Will continue to maintain the system
		Overall the observation was good.	Will maintain the same
		All the files index is need to be placed in the front page and to be attested by the concerned HOD of programme.	Instructed to all the faculty members to follow up the file indexing properly
		The faculty awards may be considered for the recognition received by the faculty members in the institution	It has been implemented for the faculty members in the Dept.
		Lab facilities for the last five year purchased equipments need to be name plated along with AMC records.	In the upcoming academic year, Dept. has planned to the work
		For the full time research scholars they can be shown as research associates in the department.	Full time research scholar showed as Research associate
14	Computer Science & Engineering	Appreciate the academic activities of faculties and students .	Each faculty member has to plan for several academic activities in the subjects what they teach.
		Records are proper and maintained	Each faculty member is assigned to take care of certain criteria of department records.
		Encourage the students for project based / outcome based learning	Mini projects will be given from 2 nd year onwards.
		More publication in SCI journals are required	A target to be set with at least one paper per Faculty member to be published in SCI journals in their domain.
		Concentrate on founded projects.	Faculty members with Ph.D., are assigned to get the funded projects.
15	Electronics and Communication Engineering	Faculty higher Studies-Strength to be increased	Non-PhD faculty members are requested to pursue PhD within next semester
		Value added course- to be Strength wed and more to be organized.	Test and Feedback analysis to be carried out. Specific Suggestions will given to students further improvement
		Slow learners- follow up and improvement to be recorded.	Before and After CIA test, Special coaching classes will be scheduled

		Consultancy activities need to be Strengthened	Brochure along with Faculty Expertise are circulated to various electronics and communication Industry.
		Feedback received from faculty to be reviewed and gap analysis to be mode.	Feedback with gap analysis will be done.
16	Electrical & Electronics Engineering	Indexing of files to be enhanced / Bar chart to be filed	Instructed Faculty Members to follow Indexing of files and include Bar chart.
		Funding for R & D projects to be received	Two No. of. R & D Projects were submitted to DST and it is Under Progress.
		Patent publication by students / Faculty	Advised Faculty Members to work for Patent publication and also students are encouraged to work in innovative project for Patent publication.
		Extension activity to be improved	For the Forthcoming Semester minimum Two No. of. Extension Activity to be conducted.
17	Food Technology	All the course files were neatly arranged	The same practice will be followed.
		Remedial courses were arranged for slow learners and software training to be arranged for the advanced learners.	Remedial classes will be continued for slow learners. For advanced learners, we will first analyse their interests and accordingly the training will be arranged. Statistical tools training will be given.
		Since the Food Technology programme was started during the year 2018, The student outcomes and research activities are not able to quantify	(i) Now students will be entering into pre-final year, skill based programmes will be provided. (2) Motivate the students to attend conferences, seminars and workshops (3) Industry visits will be arranged. (4) Research proposal are under preparation.
18	Mechanical Engineering	Establishment of competitive Examination coaching cell in mechanical	It will be planned in future
		Addition of two more Smart class rooms	Additional smart class rooms will be formed

		Interdisciplinary projects like e-vehicles, machine learning, IoT etc may be encouraged	It will be planned in next academic year
		Modernisation of labs and purchase of Advanced softwares should be carried over for experiential learning of students.	Material science research lab established in Mechanical dept.
19	Science & Humanities (Support Department)	Satisfactory work in this department.	Will concentrate on the lagging part and work hard to make the department excellent.
		As a supporting Department, concentrate on study basic ideas among students with practical learning	Internship is made mandatory. Industrial may be arranged.
		Stress on funded projects required	Faculty will be motivated to write project proposals and apply for funded project
		More activities on Soft Skill and Career Guidance is required.	Competitions to enhance soft skills and Seminars on Career Guidance will be conducted.
20	Architecture	Faculty of Architecture, has further potential to outdo its own standing with a little more support and encouragement.	Support received from the management and we are going ahead with the department Improvement/Renovation work as per the plan
		The Department is growing and the infrastructure to be updated to the need.	Yes, it is updated
		The faculty has also set foot into journal publication and is moving ahead in every aspect.	Yes, our faculties have published papers in national and international journals as well as in conferences and are moving ahead with more research papers
		The students are knowledgeable and are susceptible to change in the latest trends in the design fraternity and makes the department proud.	Yes , the students are learning and intervening on latest trends in the design fraternity

21	Pharmacy	Course files are not updated for some subjects	The faculties are instructed to complete and submit the files.
		Stock register for chemicals and glass wares are to be prepared in a proper format	Action taken to write new stock register for chemicals and glass wares in store as well as in each laboratory. Work has been started
		Faculty members have to attend seminars and FDP	Here after our faculties are encouraged to participate more Seminar and FDP programs conducted by other colleges and institutions. All are attending more webinars and FDP programmes also.

Director, IQAC