6.5.2 - The institution reviews its teaching-learning process, structures, and methodologies of operation and learning outcomes at periodic intervals through its IQACas per norms

Additional Information

IQAC being the Quality Governing Body of the Institute monitors and reviews the curricula development, teaching learning process, research and innovation, infrastructure development, student development and overall governance. IQAC takes regular feedback from the students to make needful changes of each of the above parameters to ensure a happy environment on campus. The IQAC prepares an Institutional IQAC Report on a daily basis, and circulates amongst the management and departments, which defines the health of the Institution on any given day.

Quality of Student Intake:

To improve the quality of student intake, it is highly essential that every student on campus is shown a personalized significant improvement over his/her tenure in the Institute. This is possible with the adherence to systematic processes and procedures at all stages. These include the quality of faculty, quality of projects, process-oriented examinations, well-equipped library and laboratory, guidance for competitive exams and higher education, classroom ambience, pleasant environment etc., which are all regularly monitored and recommended for improvement by the IQAC.

Orientation Program:

In order to bridge the gap between high school education and professional education, aspecial orientation program is conducted to familiarize the new students about the readiness for professional education. In the orientation program,

- Students are well-versed with the academic gaps, as each one of them would have had a different board, in their high school.
- Students are given an introduction to the relevance of the syllabus in curriculum with their careers.
- Students are educated on the significance of ethics and morals in professional education.
- Students are geared up towards project based and research learning than the traditional method of learning.
- Students are detailed about the Curricula, Time-Table, Programme structure, syllabi of the courses, before the semester commences.

Process for the Design & Development of the Curriculum:

The curriculum is designed for the holistic development of the student such as domain knowledge, technical and communicational skills, environmental awareness, personality development, physical fitness, professional ethics etc.

In order to provide, hands on experience and experienced learning, short-duration internships and long duration (semester) industry internships are made part of the curriculum. For all students to adapt themselves to the growing technology trends in emerging areas, add-on courses, self-learning courses are also incorporated.

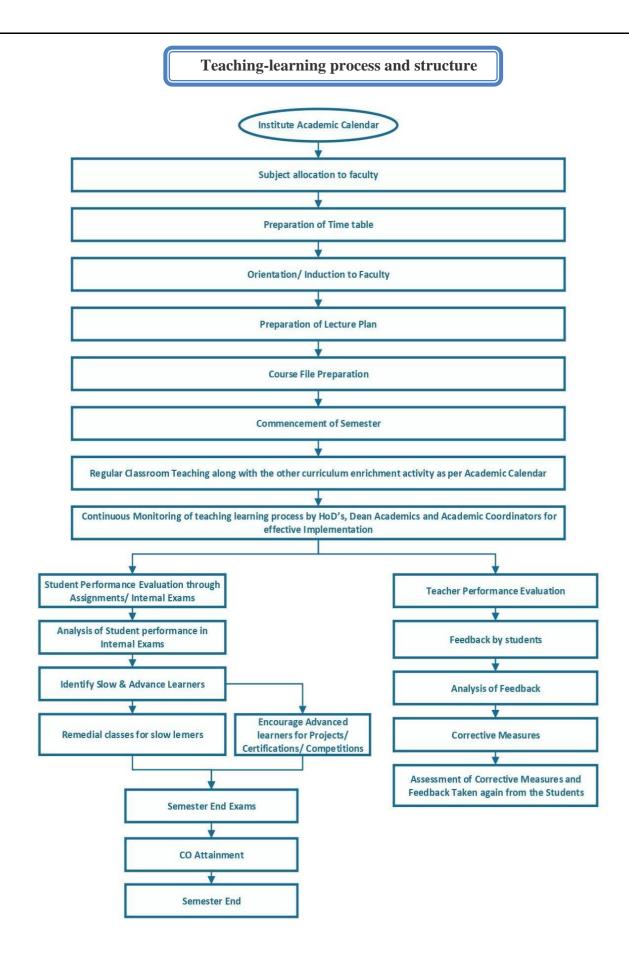
While developing the curriculum, inputs from all the stakeholders are collected and duly incorporated. A well-structured Curriculum Design and Monitoring Committee (CDMC) is in place at the departmental level with the Head of the department (HoD) as Chairperson and supported by three other members. The curriculum revision is duly approved by Board of Studies (BoS), Academic Council, and Board of Management (BoM), consisting of senior academicians and renowned experts from the industry. IQAC, with consistent feedback received through Student Satisfaction Survey, identifies and fills the gaps in the curriculum. Consequently, IQAC also recommends various key areas and courses related to professional ethics, gender-sensitivity, human values, environment, and sustainability in the Curriculum. The standards of teaching, learning, and evaluation are continuously improved.

Academic Calendar: Academic calendar is prepared and disseminated well in advance, among all the stake holders by displaying in the classrooms and notice boards, and also placed in the Institute's website. The academic calendar consists of the schedules for the class work, cocurricular and extracurricular activities and examination schedules.

Department Planner: The department prepares its department academic planner, in sync with the Institute Academic Calendar. It is a healthy practice in the institute to allocate courses to the faculty well in advance so that they can prepare quality lecture plan, draft materials, and also record their e-content.

Faculty Orientation Programme: All faculty are mandated to attend an Orientation Program on the best practices in Teaching-Learning process in the beginning of every semester. During this program, the faculty are explained the importance of various teaching methodologies, pedagogical skills, course file preparation and the importance of transparent and effective evaluation process. They are also well-versed with the need and methodology to connect with students individually, and ensure the improvement of every student, by balancing their emotional and psychological quotient.

Preparation of lesson plan for each course in every semester: A structured lesson plan is prepared by the faculty members for all the subjects they teach in that particular semester. Enriching the curriculum with student-centric teaching methodologies, guest lectures, industrial visits, and internships, etc. is part of this activity.



e-content development: Recording studios are in place on campus, for faculty to record and develop their own e-content for allthe courses. Every faculty prepare the lecture content and recorded video lectures before the commencement of the semester.

B) Continues assessment and remedial measures for improvement of the teachinglearning process, structures & methodologies of operations, and learning outcomes:

Evaluation of the teachers through students' feedback:

The IQAC developed a structured feedback portal to evaluate and analyze the faculty's performance in the teaching-learning process. The feedback sheet evaluates the regularity, pedagogy skills, subject knowledge, and transparency in evaluation, mentoring & guiding, etc. The IQAC collects the feedback before the mid-term examinations and analyses the strengths and weaknesses of the respective faculty based on above parameters. The analyzed report is shared with the Principal, Dean Academics, HoDs, and individual faculty members for necessary action for improvement of the Teaching-Learning Process. It is also shared with the Rector of the institute for appropriate corrective action.

Regular monitoring of the classes by administrators:

It is observed that in spite of all the measures taken before commencement of the class work, some faculty were rated low feedback. To overcome this challenge, Principal and Rector visit classes randomly, and spend time in the class while the faculty is delivering the lecture. Suggestions for improvement are given to the faculty where ever it is necessary. A well-defined score sheet is designed for this purpose.

Evaluation of student performance through assignments and internal exams:

The institute has adopted a continuous student assessment process through assignments, weekly tests, internal examinations and semester end examinations for each course. Institute maintains an effective examination system for conducting internal examinations and also implemented a systematic and fair evaluation process. The performance of the students in the internal exams is one of the key parameters to designate a student as either an advanced learner and slow learner. Accordingly, special measures are taken to improve the performance of slow learners. At the same time, workshops, training activity and special coaching for GATE, certification courses etc., planned for advanced learners.

Disclosure of answer scripts:

Students are provided with an opportunity to see their answer scripts of each course of the internal exams, after completion of evaluation. This is aimed to bring more transparency in the internal evaluation.

Examination result analysis:

After the announcement of the end semester examination results, a thorough analysis is carried out to analyze the performance of the students in various subjects. Faculty are asked to prepare reasons for the performance of the students, and detail the measures that would be taken to eradicate the same, in the upcoming examinations.

Periodic Academic Audit: The academic audit provides an opportunity to enhance the quality of the teaching learning process in the Institute. The academic audit is conducted

for all the departments immediately after the results of the end semester. The audit is conducted at three levels namely, faculty level, department level, and institute level.

The first level is the self-analysis by faculty handling the respective courses regardingCO attainments, assessment tools used, assessment analysis, etc.,

The second level of audit is conducted by the respective department's academic audit committee. As a process of this audit, in addition to the above, they review the quality of internal examination papers. Semester-end examination question papers are audited by experts who are invited from other institutions. Corrective actions are taken based on audit results.

The third level audit is conducted by IQAC at the institute level, wherein a team comprising of senior faculty, audit the various departmental academic activities. This audit comprises observations about the best academic practices of the institution and suggest areas for improvement.

Finally, a summary of the audit is prepared for detailing an action plan to improve the quality of academic activities. The academic audit is normally conducted once a semester.

VISTA and Yuvtarang:

VISTA (annual technology fest) and Yuvtarang (annual cultural fest) are conducted, which is witnessed by prominent guests and thousands of students, in the region. These events provide an opportunity for the students to develop and learn team spirit, event management, leadership skills, innovative way of thinking and interpersonal skills.

In VISTA, students exhibit their talent vide technical projects, paper presentations, technical quiz etc. During the fest workshops, guest lectures are also arranged.

- C) Other Initiatives of Student learning outcomes: The institute monitors the performance of the students regularly. It has a specified procedure to collect and analyze data on student learning outcomes. The following points are adopted by the institute in this context:
 - Regular monitoring of students' attendance by the separate team through the online attendance portal.
 - The HoDs and the Discipline Committee members make random visits to ensure the smooth functioning of classes.
 - Regular class tests and interactions at all levels.
 - The class review committee meeting is regularly conducted with students to take feedbackand appropriate steps are taken to enhance the teaching-learning process.
 - Midterm and continuous evaluation comprising of internal tests, assignments, group discussions, and seminar presentations.
 - Special classes are conducted for slow learners to improve their performance.
 - Training activities, coaching for competitive exams, special workshops, certification courses are conducted for advanced learners.
 - At least 75% attendance is compulsory in each semester for all students.

- Timely redressal of students' grievances.
- Semester system is followed for all the programs.

D) Other Initiatives of IQAC

The IQAC monitors the implementation of Teaching Learning Process time to time and recommends suggestions to the concerned stakeholders for the improvement of methodologies of operation and learning outcomes. The teaching-learning processes are reviewed, and improvements are implemented, based on the IQAC recommendations. The major initiatives during the years include the following:

- All the senior students are educated about the ill effects of ragging and it is seen that the campus is raging free.
- Conducted National level workshop namely, IQACNLW-2021 on the teaching-learning process, structures and methodologies of operation, and learning outcomes
- Automation of Examination Processes
- Conducting workshops on curriculum development, teaching methodologies and research methodologies.
- Effective implementation of green initiatives in campus regular tree plantation, solar energy harvesting, e-vehicles, recycle, reduce and reuse of waste.
- MoUs with prestigious Institutes, Universities, and Govt. agencies.
- Implementation of year wise uniform for the students.
- Participation in NIRF, ARIIA Rankings
- Certifications by ISO, Green Audit, Energy Audit, and Environment audit.