

AICTE Mandates

Academic Reforms in TEQIP-III

1) Mandatory Internships

Objective:

Every student in technical institution shall do **three** internships each spanning **4 to 8 weeks** before completion of the under-graduation. The responsibility will be on the institution for helping the students in finding suitable industry or organization for the internship.

1) Mandatory Internships - Methodology

- Identifying faculty coordinator
- Prepare discipline specific list of industries/ companies/ organisations (small scale, MSME, large scale, Internshala etc.)
- Updating your own website with all details of students (contact info, CV, performance etc.), prepare T & P brochure
- Communication with the industries/ organisations/ companies with institute details and student profiles.
- Communication with Board of Apprenticeship Training for exploring additional avenues.
- MoU/ Agreement signing with the industries
- Awareness workshops for students to inform them regarding the different career paths.
- Arrange industry conclave
- Categorize students for internships based on interest (through a survey).
- Display of allocation of industry for internships (with proportionate funding)
- Issue of letters/NOC to the students and copy to industry.
- Seeking assistance from the mentor institution, where ever required.

1) Mandatory Internships - Doubts

- Big industries (TATA, MAHINDRA,TCS etc) are not necessary, students can do their internship in Small Scale industries.
- Students can work on institutional or regional level challenges respective to their field with guidance of faculty or expert

2) Training of teachers (SWAYAM)

Objective:

Every teacher in each of the technical education disciplines shall mandatorily undergo an annual refresher course delivered through **SWAYAM** portal, encapsulating all the major advances in the field of their study. Online courses would also be prepared and delivered through the SWAYAM platform for improving the pedagogical techniques of the teachers. The participation in the courses by **at least 50% of the faculty** would be a mandatory condition for approval of the institution. Similarly, there should be leadership training for the heads of the institutions once in 2 years. These trainings would also be hosted through the SWAYAM platform.

2) SWAYAM - Methodology

- Student & faculty registration on SWAYAM portal
- Establishment of Smart Classroom (Computer Centre with internet & Audio-Visual room in Institute)
- Introducing flexibility of opting for credit transfer (As per UGC guidelines, 20% credit courses can be done through SWAYAM portal)
- If credit transfer not possible, at least 1 course done by students through SWAYAM (Non-credit)
- Appearing for examination & certification.
- Setting infrastructure for SWAYAM Prabha (TV set with setup box, as per the world bank guidelines)
- Registration of faculties on SWAYAM for course certification. (Certification fees can be booked under TEQIP-III). Registration of at least 50% faculty every year is mandatory.
- Development of online courses for uploading it on SWAYAM (for ATUs)

2) SWAYAM - Doubts

3) Induction training

Objective:

Every student, on admission, shall be put through a mandatory Induction training to reinforce the fundamental concepts and the required language skills required for the technical education.

The focus is to work closely with the newly joined students in making them feel comfortable, allow them to explore their academic interests and activities, reduce competition and make them work for excellence, promote bonding within them, build relations between teachers and students, give a broader view of life, and build character. This will be covered through **Universal Human Values**.

3) Induction training - Methodology

- Identify mentor faculties (1:20)
- Training of faculty mentors by induction coordinators who received training
- Identifying student subject deficiency
- Conduct of induction program for first year students:
 - Universal Human Values
 - Local Visits
 - Physical activities (through physical instructor, senior students, coaches)
 - Art and craft training (through art instructor, senior students)
- Guest lectures
- Proficiency module as requirement of student (own faculty with honorarium/hired experts)
- Student Feedback

3) Induction training - Doubts

- Participation of teachers from TEQIP institutes in Regional Induction workshops conducted by AICTE was below expectation
- AICTE has given mandate for 3 week Induction workshop, but many institutes are not following stipulated time-period and conducting induction programme for 1-2 weeks or even 1 day.
- Images shared by institutes show students performing in exercise activities, paintings and different workshop. But it has been observed that motivational and stress relieving programmes are not being conducted which are real motives behind Induction Workshop

4) Revision of curriculum

Objective:

Every affiliating Technical university shall constitute subject-wise **industry consultation committee (ICC)** with the mandate of examining the existing curriculum and for making suitable changes in the curriculum every year on the lines of **outcome based education**. This process shall be completed in the month of December each year for the courses to be offered in the coming Academic year. Each institution, while applying for approval, shall certify completion of this process, which will be mandatory.

4) Revision of curriculum - Methodology

- Organizing workshops for faculty so as to implement AICTE model curriculum
- Deliberations on feasibility of implementing model curriculum and incorporating appropriate changes based on local needs.
- Identification of industry experts for formation of subject wise Industry Consultation Committee (ICC).
- Communication with identified members for their acceptance
- Formation of ICC. Functions:
 - Revision of curriculum
 - Vetting of PEO, PO, CO
 - Activities for industry institute interaction
 - Guidance/assistance on internships and placement
 - Finishing courses: design and implementation
 - Industry expert lectures, Student and faculty visits to industries
 - Final year projects with sponsorships
 - Collaborative research/consultancy for students and faculties
 - Providing technical inputs to start-ups.
- Examining the existing curriculum for its suitability of industry demand

4) Revision of curriculum - Doubts

5) Industry readiness

Objective:

All students passing out of the undergraduate courses shall be imparted technical and soft **skills required for working in the industry** encompassing managerial skills, entrepreneurial skills, leadership skills, communication skills, team-working skills and technical skills. Every institute shall create a separate cell for **industry institute interaction** and while applying for extension of approval shall submit action taken report.

5) Industry readiness - Methodology

- Establishing Training and Placement Cell (with students and faculties)
- Identifying requirements of students for making them industry ready through a team of faculty/external agency
- Separate module & Training on leadership skills, entrepreneurship skills, managerial skills, communication skills, collaborative skills, etc. individually or collectively
- Organizing pre-placement programs for the students.
- Setting up Language Labs for communication skills.
- Organizing mock Interviews and GDs.
- If required arrange crash courses on technical topics of respective disciplines. (Technical Refresher Courses)

5) Industry readiness - Doubts

6) Promoting innovation/start-ups

Objective:

There shall be efforts at every level for promoting innovation and creativity in the students. The **innovation drives** like Hackathon shall be promoted, so that innovative **ideas** would emerge that can be incubated in the start-up centres. Every institute while applying for extension of approval shall submit proof of having incubated start-ups.

6) Promoting innovation/start-ups - Methodology

- Appoint faculty coordinator/advisor
- Establishing Start-up cell/club with students
- Identify location for Innovation and Start-up cell (Including equipment like computer, Wi-Fi, table, printer,)
- Awareness drive/ workshops about the idea of 'Innovation' & 'Start-up'
- Identification of Innovative/ Disruptive problems in local/national areas to be worked upon
- Setting up of Tinkering Labs in institutes
- Continuous Drive of Competitions: Smart India Hackathon, Idea stage, prototype stage, business plan, etc every month
- Providing seed money to students for their projects. (Incentivisation through prizes, academic credits, appreciation, attendance relaxation etc.)
- Expert Lectures (TA/DA and other logistics)
- Motivation through local entrepreneurs
- E-summits, conferences, seminars and other Entrepreneurship fests (organising as well as attending)
- Exposure visits to start-ups, incubation centres/ parks, venture capitals

6) Promoting innovation/start-ups - Doubts

- For promotion of Innovation/ Start-ups, Institutes should focus more on soft activities like conducting motivational sessions, Awareness about government policies and interaction with local level entrepreneurs. Funding side of Start-up should be avoided as TEQIP project funding should not turn into Venture Capitalist (VC) or Angel Investor (AIs) for start-up projects
- Institute can provide support to Start-up through procurement of necessary equipment. But long time usage of same should be taken into account.
- Institutes can promote students to participate in Smart-India Hackathon, AICTE Start-up pitches and various other regional and national level competitions. Information is available on many government websites such NASSCOM, Start-up India.

7) Exam reforms

Objective:

The final exams being conducted by the institutions shall test the understanding of the concepts and the skill - rather than the subject knowledge. A **model exam format** has been prepared and shared with the institutions and the technical universities for suitable adoption.

7) Exam reforms - Methodology

- Review the AICTE Exam Reforms document and draft proposal with necessary modifications
- Getting approval for the proposal from Board of Studies
- Getting approval for the proposal from Academic Council/ Senate
- Issue appropriate notification of exam reform and display on website (ATU)
- Conduct faculty training workshops on the exam reforms

7) Exam reforms - Doubts

- Key points in exam reforms:
 - Two-step process for bringing clarity to Programme Outcomes. Formulating competencies and performance indicators from POs which can be used to clearly set assessment goals that are synchronised with Outcome Based Education.
 - Guidelines and sample papers for using Bloom's Taxonomy to design the assessment that will demonstrate the achievement of higher order thinking skills.
 - Using different assessment methods to assess higher order and professional skills like course projects, open-ended experiments in labs, project based learning modules, MOOCs, Co-curricular experiences, Mini/Minor projects, final year projects, internship experiences, E-portfolio of student works.
 - Using rubrics as assessment tools.
 - Open-Book Examinations.

8) Mandatory accreditation

Objective:

At least half of all the programmes in the technical institutions shall be accredited through the **NBA** before 2022. Unless there is credible progress each year, the approval of the institutions can be refused. In order to assist the institutions in meeting the mandatory requirements for applying for accreditation, a separate mechanism will be put in place.

8) Mandatory accreditation - Methodology

- Identifying faculty coordinator for institute as well as for each eligible department
- Conduct workshop for faculty on accreditation procedures & Norms
- Develop Vision & Mission statements, short term goals, strategies etc
- Formulate course outcomes, program outcomes & program education objectives
- Design & implement different formats/ rubrics for student assessment with respect to program outcomes
- Conduct Industry meeting & record minutes
- Conduct Alumni Meetings & record outcomes
- Develop feedback mechanism for collecting response of students, alumni (Tracer Studies), employers etc (through google forms)
- Prepare documentation for filling Self-Assessment Report (SAR)
- Prepare Institute in terms of laboratory & required documents for teaching & learning process (Laboratory, classrooms, Lab-manuals, Library Digitisation, Computer Centre, Infrastructure Utilisation, Faculty Profile, R&D Outputs, Student Projects, Industry Linkages etc)
- Appointment of faculty for filling up vacant positions so as to maintain desired student teacher ratio (1:15 UG & 1:12 PG) and also faculty cadre ratio (1:2:6)
- Uploading SAR and Payment of accreditation fees
- Formulation & Implementation of strategies if requisite score is not obtained in Self-assessment
- Preparation of Accreditation Visit

8) Mandatory accreditation - Doubts

Thank You