अखिल भारतीय तकनीकी शिक्षा परिषद्
All India Council for Technical Education

AICTE-QIP-PG CERTIFICATE PGROGRAMME

(Scheme Guidelines)

AICTE-QIP-PG Certificate Programme under QIP Scheme

1. INTRODUCTION:

A programme for the academic development of Faculty members belonging to Core Engineering disciplines is being introduced under the existing QIP scheme named as "**AICTE-QIP-PG Certificate Programme** in Emerging Areas".

AICTE during its 159th Executive Committee meeting took a decision to introduce the programme during AY 2023-24 as many of the institutions have shown interest to start Diploma / UG /PG level courses in the Emerging areas but are facing acute shortage of faculty members possessing ample expertise in such areas. Through "**AICTE-QIP-PG Certificate Programme"** in Emerging Areas, the council aims to make the faculty members from core Engineering disciplines like Mechanical, Civil, Electrical and Electronics, Chemical etc. to get trained in the Emerging Technologies which in turn shall enable them to impart effective teaching to the students enrolled in courses on Emerging areas.

2. ADMISSION PROCESS:

AICTE shall invite the applications under "**AICTE-QIP-PG Certificate Programme"** from the faculty members of AICTE approved institutions. Based on the applications received AICTE shall be allotting the applicants to the respective host institution for the selection process. Further, the PG Certification Programme could be commenced by the concerned host institution, if and only if a minimum of 30 candidates are admitted into a course.

3. ELIGIBILITY CRITERIA:

Admission guidelines for AICTE-QIP-PG Certificate Programme are as follows:

a) Full time Regular / Permanent faculty members of AICTE approved Degree Level / Diploma level institutes, belonging to CORE Engineering disciplines like Mechanical, Civil, Material/Metallurgical, Electrical and Electronics, Chemical etc.
b) The teaching experience of minimum 5 years at graduate/diploma level at AICTE approved institution.
c) In addition to the above minimum eligibility, criteria of respective host institution shall be applicable.

4. DURATION OF THE SCHEME & BATCH SIZE:

a) The duration of AICTE-QIP-PG Certificate Programme shall be 6 months.

b) A batch of 50 candidates at one identified host institution per session.

5. MODE OF CONDUCT:

Will be offered through Hybrid mode. Out of the total SIX (6) months duration, a minimum of four weeks shall be offline.

6. PROGRAMME CONTENT:

a) Program content shall be divided into three stages:
   i. Awareness,
   ii. Expertise, and
   iii. Application
b) Courses of 18 credits as per the curriculum of the host institutions, with an equal blend of theory and practical/projects.
c) A maximum of **six credits** may be taken through NPTEL Course by candidates during the QIP-PG Certification course duration.
d) On successful completion of the QIP-PG Certification Courses, the host institution shall issue the evaluation report and the QIP-PG Certificate which shall carry the logo of both AICTE and the respective host institution.

7. AREAS UNDER THE PROGRAMME:

AI/ML/Data Science/Data Analytics, Augmented- (AR) / Mixed- (MR) / Virtual Realities (VR) / Cyber Physical Systems, IoT & Drone Technology, Intelligent Transport Systems, Robotics, 3D Printing & Additive Manufacturing

8. CREDIT FRAMEWORK AND CURRICULUM

(On page 5-6)

9. AMOUNT OF SCHOLARSHIP:

a) No fee will be charged from the candidate for the programme. The host institute will cater for accommodation of the candidates in their hostels. However, caution money of Rs. 5,000/- (Rupees five thousand only) is to be deposited (refundable on completion)

b) **For Each QIP Centre:**
   i. A lump sum amount @ Rs. 20,00,000/- (*Rupees Twenty Lakh only*) per Host institution per programme for a duration of SIX (6) months comprising of the coordination fees, accommodation, online courses, laboratory etc. exclusive of food will be paid by AICTE.

   #Amount to be released in two phases:
   a) Initially, Rs, 15,00,000/- (Rupees Fifteen Lakhs only);
   b) Remaining amount Rs. 5,00,000/- (Rupees Five Lakhs only) on submission of Utilization Certificate, Programme Completion Report and evaluation report of the students.

   ii. In case, district of the parent institute and admitting institute are same, student may opt for own stay arrangement.

10. **CANCELLATION OF ADMISSION:**

Admission to the AICTE QIP- PG Certificate Programme is liable for cancellation in case of:
a) Non-Completion of AICTE-QIP-PG Certificate Programme within the stipulated time frame.
b) Misconduct.
c) He/ She is found ineligible later.
d) Any false information furnished by the applicant or any fraudulent activity by the scholar shall lead to Penal action against him/ her.
e) Insufficient attendance for the programme.

11. **LEAVE & ATTENDANCE:**

Students/ Scholars are eligible for following leaves:

a) **Casual leave:**   2 days in one session.
b) **Medical leave:**   Maximum of one week (7 days) per session.

Note: Prior approval of the host institution is mandatory for all types of leaves.

Students should mandatorily have 80 % attendance for lectures (inclusive of off campus and on campus) and 90% attendance for Lab works to appear for final evaluation and certificate.

12. **OTHER TERMS AND CONDITIONS:**

a) During conduct of offline courses, accommodation for the students will be taken care by the respective host institution.
b) In case of a candidate failing in any of the examinations, he / she need to bear the examination charges for the re-examination as fixed by the host institution.
c) The students should get minimum prescribed grades as set by host institution and AICTE to get the certificate.

Credit framework and curriculum

Note 1: In the curriculum below, the Content for courses has been deliberately specified at a high level so that host institutions have flexibility in designing these courses, while adhering to the given framework.

Note 2: Up to 6 credits may be offered via NPTEL courses (see the suggested Resources), but final exams must be conducted in-person.

Course	Content (high-level)	Credits	Resources
CS Core 1	Problem Solving, Computational Thinking, Programming fundamentals (any programming language), Data representation and manipulation	3	
Domain Core	Core aspects of the Emerging Area of the certificate program	3 (theory) +1(lab), or 2 (theory) + 2(lab)	
CS Core 2	Data Science for Engineers	3 (theory) +1(lab), or 2 (theory) + 2(lab)	https://nptel.ac.in/courses/106106179, https://nptel.ac.in/courses/106106212
Domain specialised	A second course in the Emerging Area of the certificate program	3	
Project	Hands-on, possibly common, project in the Emerging Area	4	

Credit hours and hybrid nature

The total of 18 credits corresponds to about 200 hours of learner engagement over a 6 month or 24-week period. This is split in a hybrid manner as follows:

Nature	Program weeks	Total hours	Credit hours	Remarks
In-person at host institution	1, 2 (mandatory)	20 theory + 40 lab	20 + 20 = 40	Morning: 2 hours of theory; Afternoon: 4 hours of lab
Online (some could be in-person)	3 to 22	120	120	6 hours per week;

In-person at host institution	23, 24	10 theory + 20 lab / project + 10 theory evaluation + 20 lab / project evaluation	20 + 20 = 40	Morning: 2 hours of theory / evaluation; Afternoon: 4 hours of lab / project / evaluation

Guidelines

1. 50% based on minimum 2 quizzes (30-45 min each), assignment and project submissions.
2. The final evaluation at the host institution must constitute at least 50% of the total marks.
3. A maximum of 6 credits can be transferred through suitable NPTEL courses offered through SWAYAM.
4. AICTE will host the application form and send a list of interested candidates to each host institution.
5. The host institution should select 50 candidates, who will be supported by AICTE. A test and interview is expected to be the method of selection.

Timeline for Launch and First Batch

Event	Date
Announcement of application-	May 15, 2024
Last date to apply	June 6, 2024 (may be extended up to June 11, 2024)
Test / Date of conducting interview by the concerned Institute	June 18-20, 2024
Institute send list to AICTE	By June 20, 2024
Announcement of results by AICTE	June 24, 2024
Start of program	June 30, 2024
On- campus (Mandatory)	June 30–July 12, 2024
Online (with possible on- campus also)	July 14 - Dec 11, 2024
On campus (Mandatory)	Dec 14 – Dec 26, 2024
Final Evaluation by the Concerned institute	Dec 21 - Dec 26, 2024
Institute send list to AICTE	By Jan 6, 2024
Announcement of Final Result by AICTE	Jan 13 , 2025