



**KALLAM HARANADHAREDDY INSTITUTE OF TECHNOLOGY
(AUTONOMOUS)**

NH-16, CHOWDAVARAM, GUNTUR – 522 019
Accredited by NAAC with 'A' grade



KHIT/ADM/CIR/2026-27/008

Date: 29.06.2026

CIRCULAR

Quantum Innovation Centers (QICs) serve as elite centers of expertise in the growing and ever-changing quantum ecosystem. Many operate as a hub, an industry leader growing a quantum community by partnering with IBM directly, and serving as a central contact point for other organizations. This community might be centered on a particular specialization within quantum computing, or sometimes it may be built around a certain geographic location. QICs are providing geographically-optimized quantum communities all over the world.

The Quantum Innovation Centre of Kallam Haranadhareddy Institute of Technology is constituted to promote education, research, and innovation in quantum science and technologies, with a special focus on applications relevant to the State of Andhra Pradesh. The Centre aims to build awareness, develop competency, and foster collaborations in areas such as quantum computing, quantum communication, and quantum-enabled technologies among students and faculty.

What it means to be a QIC

There are many reasons for starting a Quantum Innovation Center. One common theme is the need for a community of expertise, for which a QIC can be a powerful catalyst. In the video below, our speakers who represent QICs will tell us what it means to them to be an IBM Quantum Innovation Center.

Key points

- QICs have a sense of obligation to industry partners, as well as to students (who are the emerging quantum workforce), and to society.
- QICs are at the forefront of quantum technology.
- QICs are often focused on partnerships within a specific geographic region.
- QICs derive great value from the IBM Quantum Network, and the communities they, themselves form.

Objectives

- To create awareness among students and faculty about fundamentals and emerging trends in quantum science and quantum technologies.
- To encourage student projects, mini-projects, and capstone projects in quantum algorithms, quantum-inspired optimization, cybersecurity, and related domains.
- To facilitate training programmes, workshops, and certification-oriented courses in collaboration with premier institutes, industries, and government agencies working in quantum technologies.
- To promote interdisciplinary research and innovation involving Computer Science, Electronics, Electrical, Physics, and allied departments in the field of quantum technologies.
- To align quantum innovation activities with institutional quality initiatives, NBA/NAAC requirements, and state-level innovation/STARTUP policies of Andhra Pradesh.

Functions – Awareness & Capacity Building

- Organise seminars, expert talks, and webinars on quantum computing, quantum communication, quantum sensing, and related topics for students and faculty.
- Conduct orientation sessions, ideation workshops, and hackathons to introduce quantum programming platforms and simulators to students.
- Facilitate short-term training programmes (STTPs), faculty development programmes (FDPs), and value-added courses on quantum technologies in association with external agencies.
- Maintain records of all awareness and training programmes (attendance, feedback, photos, reports) as evidence for accreditation and quality assurance.

Functions – Innovation, Projects & Research

- Identify potential problem statements and application areas relevant to Andhra Pradesh (such as agriculture, logistics, energy, and healthcare) where quantum or quantum-inspired solutions can be explored.
- Encourage and guide students to take up project work, internships, and start-up ideas in quantum technologies under the supervision of faculty mentors.
- Facilitate collaborative research proposals, grants, and funding applications in the domain of quantum technologies through state/national agencies and industry partners.
- Support publication of research papers, patents, and innovation outcomes arising from Quantum Innovation Cell activities.

Functions – Collaborations & Outreach

- Establish linkages with premier institutes, research labs, and industries working in quantum technologies through MoUs and collaborative activities.
- Coordinate guest lectures, panel discussions, and industry interaction programmes with experts from academia, industry, and government bodies.
- Encourage participation of students and faculty in national-level quantum innovation challenges, hackathons, bootcamps, and conferences.
- Maintain a repository of all MoUs, event reports, participation data, and outcomes for NAAC/NBA documentation and IQAC reporting.

Meetings and Reporting

- The Quantum Innovation Cell meets at least once per semester (and additionally as required) to review activities, outcomes, and future plans.
- Minutes of meetings are recorded and preserved, and an Action Taken Report (ATR) is presented in subsequent meetings to ensure follow-up.
- The Convener prepares a semester-wise report on programmes conducted, collaborations, projects, and outcomes, and submits it to IQAC and the Principal.
- An Annual Report of the Centre is presented to the Academic Council/Governing Body and used as accreditation and quality assurance evidence.

PRINCIPAL

Submitted to: 1) The Chairman
2) The Secretary
3) The Executive Directors for information.