MEMORANDUM OF UNDERSTANDING

(MoU)

BETWEEN

Chaitanya Bharathi Institute of Technology

Gandipet, Hyderabad

AND

TriQuanta Labs Private Limited

Hyderabad, Telangana

14th November, 2026

1. PREAMBLE

This Memorandum of Understanding (MoU) is made and entered into on this 14th day of November 2026.

BETWEEN

Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad, established in 1979, an autonomous engineering institution affiliated to Osmania University, Hyderabad, Telangana, India, represented herein by its Principal, hereinafter referred to as "CBIT" (which expression shall, unless repugnant to the context, include its successors and permitted assigns).

AND

TriQuanta Labs Private Limited, a company incorporated under the Companies Act, 2013 (CIN: U63990TS2025PTC203025), having its registered office at 4-474/B, Prem Nagar, New Hafeezpet, Miyapur, Hyderabad, Tirumalagiri, Telangana – 500049, represented by its Founder & CEO, hereinafter referred to as "TriQuanta" (which expression shall, unless repugnant to the context, include its successors and permitted assigns).

CBIT and TriQuanta shall hereinafter collectively be referred to as "the Parties". WHEREAS CBIT is a UGC Autonomous engineering institution of long standing with accredited programmes in Mechanical Engineering, Electronics and Communication Engineering and Computer Science and Engineering; WHEREAS TriQuanta Labs is developing India's indigenous hybrid neutral-atom and trapped-ion quantum computer (TQNC-60i) and seeks academic partners for UHV hardware, control electronics and hybrid, HPC and quantum-inspired algorithms; WHEREAS the Department of Mechanical Engineering shall be the primary academic interface for design and development of ultra-high vacuum systems and component fabrication, ECE shall support control-electronics development, and CSE-AIML shall support algorithm development for hybrid computing including HPC and

quantum-inspired machines leading toward a full-fledged quantum computer; WHEREAS both Parties wish to collaborate in good faith on education, research, skill development and laboratory creation in quantum technologies, without creating a binding commercial partnership except as separately agreed; NOW, THEREFORE, the Parties record their understanding as follows.

2. ABOUT THE INSTITUTIONS

2.1 Chaitanya Bharathi Institute of Technology (CBIT)

Established in 1979 by a distinguished group of visionaries, Chaitanya Bharathi Institute of Technology (CBIT) is esteemed as one of the premier engineering institutes in the states of Telangana and Andhra Pradesh. The Institute was promoted with the objective of facilitating the best engineering and management education to students and contributing towards meeting the need for skilled and technically conversant professionals for the nation.

Spread across a serene 50-acre campus with a built-up area of approximately 57,714 Sq. Mts., CBIT provides state-of-the-art laboratories, a spacious library with extensive printed and digital collections, sports facilities, hostels, and dedicated infrastructure for research, innovation, incubation, and entrepreneurship. The Institute offers 12 undergraduate and 10 postgraduate programmes, serving over 8,000 students annually.

CBIT has achieved numerous accolades, including UGC Autonomous Status (extended until 2033-34), an A++ Grade from NAAC (CGPA 3.59/4), NBA accreditation for several programmes, and a 4-Star Innovation Rating from the Ministry of Education's Institution's Innovation Council. It is ranked in the 151-200 band in NIRF 2025 (Engineering category) and is the first institution in Telangana to establish an Atal Community Innovation Centre (ACIC) with ₹4.51 crore funding from the Atal Innovation Mission, NITI Aayog. With over 40,000 alumni occupying leadership roles across industry, research, academia, and public service, CBIT continues to be a significant contributor to Nation-building and technological progress. For this collaboration, three departments will serve as the primary academic interfaces: (i) the Department of Mechanical Engineering (HoD: Dr. G. Laxmaiah) as the lead interface for design and development of ultra-high vacuum (UHV) systems, precision mechanical design, and component fabrication; (ii) the Department of Electronics and Communication Engineering (HoD: Dr. K. Vasanth) for control electronics, FPGA-based real-time systems, embedded hardware, signal processing and related instrumentation; and (iii) the Department of Computer Science and Engineering (HoD: Prof. S. China Ramu) for algorithm development for hybrid computing, including high-performance computing (HPC) and quantum-inspired methods, progressing toward software stacks for a full-fledged hybrid quantum computer. Allied computing programmes (AIML, AIDS, IT) may participate in algorithm and software workstreams as nominated by CBIT.

2.2 TriQuanta Labs Private Limited

TriQuanta Labs Private Limited is a DPIIT-recognized deep-tech startup headquartered in Hyderabad, pioneering the design, engineering, and software orchestration of dual-engine hybrid quantum computing systems that combine neutral-atom arrays and trapped-ion architectures. The company is developing TQNC-60i — India's first indigenous hybrid neutral-atom + trapped-ion quantum computer — with a clear roadmap toward scalable, high-fidelity quantum processors.

TriQuanta's core technical strengths include ultra-high vacuum (UHV) systems (having achieved a sustained 10^{-1} Torr cryogenics-free baseline), precision laser systems, ion traps, neutral-atom trapping and control, FPGA-based real-time control electronics, and hybrid quantum software stacks. The company operates with a strong focus on sovereign quantum capability, alignment with the National Quantum Mission (NQM), and applications in pharmaceuticals, finance, defence, materials science, and artificial intelligence.

TriQuanta acts as a technology partner for academic institutions by enabling hands-on exposure to real hybrid quantum hardware, joint research projects, faculty development, and the progressive establishment of advanced quantum teaching and research laboratories.

3. PURPOSE AND OBJECTIVES

The purpose of this MoU is to establish a comprehensive framework of cooperation between CBIT and TriQuanta Labs for the advancement of Quantum Technologies — with particular emphasis on hybrid quantum computing architectures — through education, research, innovation, skill development, and infrastructure creation. The collaboration will be anchored on three departmental workstreams at CBIT: Mechanical Engineering (UHV systems, design and component fabrication), Electronics and Communication Engineering (control electronics), and Computer Science and Engineering (hybrid, HPC and quantum-inspired algorithms leading to a full-fledged quantum computing software stack). The Parties recognize the transformative potential of hybrid quantum systems and are committed to building a robust ecosystem that prepares students, faculty, and professionals for the quantum era while strengthening India's sovereign quantum capabilities.

The objectives of this collaboration are to:

- Enhance Skill Development: Provide students with structured training and hands-on experience in quantum technologies, including hybrid quantum computing (neutral atoms + trapped ions), UHV system design and fabrication (Mechanical Engineering), quantum control electronics (ECE), and algorithms for hybrid computing, HPC and quantum-inspired machines progressing toward a full-fledged quantum computer (CSE-AIML), to create a pipeline of skilled professionals ready to meet industry and national demands.
- Promote Research & Innovation: Facilitate joint research projects, internships, and problem-solving initiatives across Mechanical Engineering (UHV systems, design and component fabrication), ECE (control electronics), and CSE-AIML (hybrid, HPC and quantum-inspired algorithms leading to a full-fledged quantum computer), aligned with national priorities.
- Establish Infrastructure: Assist CBIT in planning, designing, and deploying state-of-the-art quantum teaching and research laboratories, including procurement advisory, equipment selection, installation, commissioning, and faculty training for hybrid quantum systems.
- Build a Quantum-Ready Workforce: Strengthen faculty competence through structured Faculty Development Programs (FDPs) and curriculum integration focused on hybrid quantum technologies.
- Foster Collaboration: Create a sustainable model of industry–institute partnership that facilitates knowledge exchange, joint supervision of research, and long-term strategic alignment for mutual advancement and national benefit.

4. SCOPE OF COLLABORATION

The broader scope of collaboration between the Parties encompasses the following key areas:

4.1 Skilling & Training

TriQuanta will design and deliver structured training programs in quantum technologies with emphasis on: (a) UHV engineering, vacuum-compatible mechanical design and component fabrication, in partnership with the Department of Mechanical Engineering; (b) quantum control electronics, FPGA/embedded systems and instrumentation, in partnership with the Department of Electronics and Communication Engineering; and (c) algorithms for hybrid computing, HPC and quantum-inspired machines, progressing toward software for a full-fledged quantum computer, in partnership with the Department of Computer Science and Engineering. CBIT will facilitate access to students, training venues, and required academic support for smooth execution.

4.2 Research & Innovation Projects

TriQuanta will guide CBIT students on applied research projects, internships, and problem statements aligned to the three departmental workstreams: Mechanical Engineering — design and development of UHV chambers, vacuum hardware, precision fixtures and component fabrication; Electronics and Communication Engineering — control electronics, FPGA-based real-time control, embedded systems and signal-processing chains; and Computer Science and Engineering — hybrid-computing algorithms, HPC integration, quantum-inspired methods, and software orchestration leading toward a full-fledged quantum computer. This includes joint supervision of B.E. and M.E. projects and theses.

4.3 Access & Service Utilization

CBIT may utilize TriQuanta's technical expertise, consultancy, software tools, platform access, test-bed environments, and other technical services for student projects, laboratory experiments, prototype development, and faculty research initiatives, subject to mutual agreement and resource availability.

4.4 Internships & Knowledge Exchange

The Parties will facilitate internships, guest lectures, mentorship programs, and joint supervision of student research projects, along with the exchange of expertise between TriQuanta professionals and the CBIT academic community.

4.5 Outreach & Dissemination

Co-organization of conferences, seminars, public lectures, community outreach programs, and capacity-building initiatives aimed at increasing awareness of hybrid quantum technologies and strengthening the quantum ecosystem.

4.6 Setting Up Quantum Labs

TriQuanta will assist CBIT in planning, designing, and deploying quantum teaching and research laboratories with a focus on hybrid architectures. The Mechanical Engineering department will be the primary academic interface for UHV hardware layout, mechanical design, fabrication and integration of vacuum components; ECE will support control-electronics racks, FPGA/embedded instrumentation and laboratory control loops; and CSE-AIML will

support algorithm benches, HPC interfaces and hybrid/quantum-inspired software environments. Collaboration may include procurement advisory, equipment selection, installation, commissioning, and faculty training. A joint roadmap will be created for phased expansion of quantum lab facilities over a multi-year horizon.

4.7 Establishing Consortia

The Parties may work together to establish consortia for undertaking research projects in academic disciplines and technology areas that hold potential to transform the future. This includes academia–industry partnerships addressing cost-effective hybrid quantum infrastructure and UHV hardware (Mechanical Engineering), quantum control systems (ECE), and hybrid / HPC / quantum-inspired algorithms and secure quantum communication (CSE-AIML).

4.8 Intellectual Property (IP)

Both parties agree to collaborate on the creation and development of intellectual property arising from joint research initiatives. The ownership, protection, and commercialization rights of any jointly developed IP shall be governed by mutually agreed terms outlined in a separate IP agreement. Both parties shall make every effort to fairly and equitably share the benefits arising from such developments.

4.9 Curriculum Development

TriQuanta shall provide inputs that can help CBIT enhance its syllabus to meet industry requirements and current job market demands in quantum technologies, especially: UHV and precision mechanical design (Mechanical Engineering); control electronics and embedded/FPGA systems (ECE); and hybrid computing, HPC and quantum-inspired algorithms leading to a full-fledged quantum computer (CSE-AIML). TriQuanta engineers and scientists may be invited as guest members in Board of Studies (BoS) and curriculum design meetings.

5. RESPONSIBILITIES OF THE PARTIES

5.1 Responsibilities of CBIT

5.1.1 Point of Contact

Nominate a faculty member as the Point-of-Contact for all official communication related to this MoU, and inform TriQuanta of any changes in the designated contact.

5.1.2 Student Facilitation

Provide access to interested students for training, internships, and project work, including facilitating participation in industrial training programs of not less than 2 weeks duration during summer vacation. Provide training programs of duration and format mutually agreed for each cohort.

5.1.3 Academic Support

Allot faculty members for joint guidance of student projects (BE projects of one semester duration, and ME projects of not less than 9 months duration), and facilitate student participation in evaluation seminars conducted during/end of the semester.

5.1.4 Infrastructure Access

Provide access to campus locations, laboratories, and necessary facilities for the execution of collaborative activities, subject to institutional policies and prior scheduling.

5.1.5 Curriculum Integration

Invite TriQuanta scientists/engineers as guest members in Board of Studies (BoS) and curriculum design meetings to enhance the syllabus and ensure it meets industry requirements, subject to HoD approval for the next BoS.

5.1.6 Honorarium

Pay honorarium to TriQuanta personnel for Guest Lectures and Course Delivery as per AICTE guidelines; vice versa for CBIT faculty.

5.1.7 Industrial Visits

Coordinate industrial visits for students at TriQuanta's facility (subject to operational readiness and safety clearances) to provide exposure to hybrid quantum hardware, UHV systems, design, and manufacturing processes.

5.1.8 Research & Consultancy

Offer the services of domain expert faculty for research projects and consultancy services requested by TriQuanta, providing estimates of cost and time for completion.

5.1.9 Content Approval

Review and approve all content and information shared with TriQuanta for factual accuracy and institutional appropriateness.

5.2 Responsibilities of TriQuanta Labs

5.2.1 Point of Contact

Nominate an employee as the Point-of-Contact for all official communication related to this MoU, and inform CBIT of any changes in the designated contact.

5.2.2 Training & Certification

Provide certified training of not less than 2 weeks to interested students and issue 'certificates-of-completion' to successful participants, subject to management approval. Conduct at least one evaluation to assess student performance and maintain records of attendance/performance.

5.2.3 Project Guidance

Allot appropriate technical personnel to guide student teams for BE projects (one semester duration) and ME projects (9 months duration), and share necessary hardware/software infrastructure for project completion, subject to management approval and resource availability. Students may work on live projects serving both parties' interests.

5.2.4 Internships

Provide internships to B.E./M.E. students for a duration of not less than one semester, with provisions for potential absorption as regular employees through the due recruitment process, subject to management approval and at the sole discretion of TriQuanta. Internships shall be offered subject to available projects, resource availability, and selection criteria determined solely by TriQuanta.

5.2.5 Guest Lectures & Course Delivery

Provide experienced scientists and engineers to present technical guest lectures and deliver advanced/curriculum courses as requested by CBIT, subject to management approval. Innovative projects and experiments related to hybrid quantum systems may be shared through these sessions.

5.2.6 Industrial Visits

Allow 1-day industrial visits for students at their facility (when operationally feasible), organizing the visit with a designated coordinator, subject to management approval and safety protocols.

5.2.7 Research & Consultancy

Engage CBIT faculty for research projects and consultancy services, providing necessary funding and consultancy charges for design, test, and review of products/services/design where mutually agreed.

5.2.8 Access & Services

Provide access to its facilities, including laboratory resources, software, and other technical resources, to CBIT faculty and students as per prevailing norms and subject to prior approval and safety clearances.

5.2.9 Recognition

TriQuanta agrees to recognize CBIT as one of its academic partners in the domain of Quantum Technologies for collaborative academic and research initiatives, providing technical expertise, strategic guidance, and support for establishing Centers of Excellence (CoE) and industry-sponsored labs at CBIT.

6. FINANCIAL ARRANGEMENTS

This MoU constitutes a non-commercial, institutional collaboration. Neither Party shall be liable to make any monetary payment to the other solely by virtue of this MoU. Each Party shall bear its own costs incurred in the performance of its respective responsibilities. Any specific activity involving cost-sharing or commercial terms shall be mutually agreed in writing through a separate Statement of Work (SOW) or addendum. Honorarium for guest lectures and course delivery will be paid as per AICTE guidelines. There is no financial commitment from either side unless explicitly agreed in writing.

7. INTELLECTUAL PROPERTY RIGHTS (IPR)

All pre-existing intellectual property, trademarks, logos, and institutional marks of each Party shall remain the exclusive property of that Party. The ownership, protection, and commercialization rights of any jointly developed IP arising from the collaboration shall be governed by mutually agreed terms outlined in a separate IP agreement.

The rights regarding publications, patents, royalty, and ownership of software/design/product developed under the scope of this MoU will be decided by the Parties based on mutual agreement on a case-to-case basis, depending upon the contribution from both sides. Sharing of expenditure in securing such rights and income accrued through royalty will also be decided on a case-to-case basis after mutual consultation and agreement.

If the outcome of a project relates to matters of secrecy and concern with the security of the State and the Country, the same will not be allowed for publication/printing in any form.

8. CONFIDENTIALITY

Both Parties agree to maintain confidentiality of all technical, financial, research, academic, proprietary, and institutional information exchanged under this MoU unless disclosure is required by law or mutually agreed in writing.

Confidential Information shall mean any proprietary information, data, or facts belonging to the Parties collectively or severally, disclosed by the disclosing party, whether in writing, verbal, or electronically, irrespective of the medium in which such information is stored, which is marked confidential or specifically agreed to be kept confidential.

Confidential information shall not include information which:

- (a) is or becomes publicly available without breach of this MoU;
- (b) was already lawfully in possession of the receiving Party prior to disclosure;
- (c) is independently developed without reference to confidential information;
- (d) is lawfully obtained from a third party without restriction;
- (e) is disclosed with prior written consent; or
- (f) is required to be disclosed pursuant to law or court order, after providing prior notice to the disclosing party.

Both Parties shall bind their respective personnel who come into possession of any confidential information not to disclose the same to third parties without written approval, and shall put in place adequate and reasonable measures to secure such information.

9. COORDINATION MECHANISM

The Parties shall nominate their respective Points-of-Contact for administrative and project coordination. Any exchange of official communication shall be through these designated contacts.

TriQuanta Labs Private Limited	CBIT
Primary Contact / Founder & CEO Name: Dr. Naga Chaitanya Kosanam Designation: Founder & CEO Email: naga@triquantalabs.com Mobile: +91 96110 90001	**Project Coordination** Name: Dr. T Sudhakar babu Designation: Associate Director – R&D Email: director_randd@cbit.ac.in Mobile: +91- 8466997201

SPOC **Same as above**	**SPOC** Name: Dr. Matam Santoshi Kumari Designation: Assistant Professor, Dept. of Maths Email: santoshikumari_maths@cbit.ac.in Mobile: +91-8618799545

The Parties shall jointly develop a program schedule and topic list following execution of this MoU, and shall convene review meetings periodically (at least twice a year) to assess progress and content effectiveness.

10. VALIDITY OF THE MoU

This MoU shall come into force upon affixing the signatures of the authorised representatives of the Parties and shall remain valid for a period of Three (3) years from the effective date. The MoU may be renewed upon mutual written consent of both Parties. However, if any important combined projects are under execution, both parties agree to complete the work even if the MoU is not effective after three years.

11. TERMINATION

Either Party may terminate this MoU by giving thirty (30) days written notice to the other Party. Termination shall not affect the completion of any activity already in progress, nor the confidentiality and intellectual property obligations, which shall survive termination.

12. AMENDMENTS

Any amendment, modification, or addendum to this MoU shall be made only in writing and duly signed by authorised representatives of both Parties. Such amendments shall become an integral part of this MoU.

13. FORCE MAJEURE

Neither Party shall be considered in default or held liable for any delay or failure in performance of obligations under this MoU if such delay or failure arises due to events beyond its reasonable control, including natural disasters, floods, fire, strikes, lockouts, war, civil disturbances, governmental restrictions, pandemics, epidemics, or other force majeure events.

The affected Party shall notify the other Party in writing within a reasonable period (not exceeding 60 days of the event). Both Parties shall mutually discuss and decide reasonable extensions of timelines wherever necessary, but no monetary allowances shall be made unless mutually agreed.

14. DISPUTE RESOLUTION

Any dispute arising out of or relating to this MoU shall first be resolved amicably through mutual discussions between the Parties. If the dispute remains unresolved, the matter shall be referred to arbitration in accordance with the provisions of the Arbitration and Conciliation Act, 1996. The arbitration shall be conducted by a sole arbitrator

appointed by mutual consent. The venue of arbitration shall be Hyderabad, Telangana, India, and the language of arbitration shall be English. The decision of the arbitrator shall be final and binding on both Parties.

15. GOVERNING LAW AND JURISDICTION

This MoU shall be governed by and construed in accordance with the laws of India. The courts at Hyderabad, Telangana, India shall have sole jurisdiction over matters arising under this MoU.

16. GENERAL TERMS

16.1 Relationship of Parties

Nothing contained in this MoU shall be construed as creating any partnership, joint venture, employer-employee relationship, or agency relationship between the Parties.

16.2 Notices

Any notice or communication required under this MoU shall be made in writing and sent through registered post, courier, or official email communication to the authorised representatives of the respective Parties.

16.3 Entire Agreement

This MoU constitutes the entire understanding between the Parties concerning the subject matter and supersedes all previous discussions, communications, or understandings relating thereto. In case of any conflict between this MoU and any subsequent Statement of Work (SOW), the relevant SOW will take precedence.

17. LIMITATION OF LIABILITY

Neither party shall be liable for indirect, consequential, incidental, special, or punitive damages arising from activities under this MoU.

18. BRAND / LOGO USAGE

Neither Party shall use the name, logo, trademarks, or branding of the other Party in promotional or marketing materials without prior written consent.

19. PUBLICATION

Any publication arising from collaborative activities that references TriQuanta proprietary information shall be submitted to TriQuanta at least 30 days prior to publication for review and vice versa.

20. LEGAL STATUS

This MoU is intended to express the mutual intentions of the Parties and does not create any legally binding financial partnership unless otherwise agreed through separate written agreements, except for the clauses on Confidentiality and Intellectual Property, which are intended to be binding.

21. SIGNATORIES

IN WITNESS WHEREOF, the Parties have signed this Memorandum of Understanding on the date first mentioned above.

For Chaitanya Bharathi Institute of Technology (CBIT)

Signature: _____

Name: Prof. C.V. Narasimhulu
Designation: Principal, CBIT
Date: _____
Seal

Dr. V. K. Chaudhary
14-11-26

R&D Colloboration

Signature: _____ 14/11/26

Name: Dr T Sudhakar Babu
Designation: Associate Director of R & D

SPOC
Signature: _____

Name: Dr Matam Santoshi Kumari
Designation: Assistant Professor, Dept. of Maths

Witnesses for CBIT
Signature: _____

Name: Dr Y Rama Devi
Designation: Head & Professor of CSE(AIML)

Signature: _____

Name: Dr. G. Laxmaiah
Designation: Head & Professor of Mechanical

Signature: _____

Name: Dr. K Vasanth
Designation: Head & Associate Professor of ECE

Prof P. Narasimha Sastry

For TriQuanta Labs Private Limited

Signature: _____

Name: Dr. Naga Chaitanya Kosanam
Designation: Founder & CEO
Date: _____
Seal

Witnesses For TriQuanta Labs

Signature: _____

Name: ASHOK VUDAYAGIRI
Designation: Prof. Univ of Hyderabad.

NAME :- PRUTHVI SAMRAT

Pruthvi Samrat