



Workshop on
Quantum Computing: Theory, Algorithms and Reality (QCTAR)
10-11th March 2026 – Tentative Schedule



Day 1-10th March 2026	Session
9.15 am – 9.30 am	Welcome by QuRP
9.30 am - 10.00 am	Introduction and Motivation
10.00 am - 11.00 am	Quantum Information Basics: States, Superposition and Measurement
11.00 am - 11.15 am	Break
11.15 am - 12.15 pm	Visualizing and Manipulating Qubits — Quantum gates & Quantum circuits
12.15 pm - 1.30 pm	Lunch
1.30 pm - 3.00 pm	Quantum Algorithms: Framework & Complexity
3.00 pm - 3.30 pm	Break
3.30 pm - 5.00 pm	Flagship Quantum Algorithms — Search, Fourier Transform & Factoring
5.00 pm - 5.15 pm	Summary and wrap-up
Day 2-11th March 2026	Session
9.30 am - 9.45 am	Quantum Programming Frameworks
9.45 am - 11.15 am	Hands on Quantum Programming - From Quantum Gates to Quantum Circuits
11.15 am - 11.30 am	Break
11.30 am - 12.30 pm	Quantum Algorithms in Practice — From Simulators to Hardware
12.30 pm - 1.30 pm	Lunch
1.30 pm - 2.30 pm	Noise to Fault Tolerance — Making Quantum Computing Work
2.30 pm - 3.30 pm	AI as an Enabler for Quantum Computing
3.30 pm - 3.50 pm	Break
3.50 pm - 4.50 pm	Panel discussion: Future directions-Careers, Research the Quantum Ecosystem Academia and industry experts
4.50 pm – 5.00 om	Concluding Remarks