

## About SCOPE

The school has one of the best infrastructures including domain-specific labs associated with the technical departments. The main aim is to produce computing graduates with potential, to design and develop systems involving the integration of software and hardware devices, employ innovative approaches in programming and problem solving, and create large scale software systems. With an objective of developing core competence in the subject matter specializations and special interest groups for learning newer technologies. The school has formed Department of Analytics, Computational Intelligence, Database Systems, Information Security, IoT and Quantum AI.

## About the event

This workshop provides hands-on training in quantum computing fundamentals, bridging the gap between classical logic and quantum mechanics. Participants will master the core principles of qubits, superposition, and entanglement while building practical circuits using industry-standard frameworks like Qiskit and Qniverse. The program covers everything from quantum gates to complex algorithms, making it ideal for researchers, developers, and tech enthusiasts looking to lead the next computational revolution.

**SDG Goals:** SDG 4: Quality Education, SDG 9: Industry, Innovation, and Infrastructure and SDG 17: Partnerships for the Goals

## Resource Persons

1. **Dr. Mugelan.R.K.**, Associate Professor, Department of Communication Engineering, School of Electronics Engineering, VIT, Vellore.
2. **Dr. Uthirakalyani.G**, Postdoctoral scholar - Networked Quantum Devices Unit, Okinawa Institute of Science and Technology, Japan.
3. **Mr. Amith Srivatsa**, School of Electronics Engineering, VIT, Vellore. (Currently - Trainee Engineer, Electronics Engineering Group, Raman Research Institute, Bengaluru)

## Advisory Committee

### Dr. N. Jaisankar

Professor and Dean In-charge, SCOPE

### Dr. H Parveen Sultana

Professor and Associate Dean In-charge, SCOPE

### Dr. Sathiya Kumar C

Professor and Head of the department, Quantum AI, SCOPE

## Coordinators

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**Eligibility:** The workshop is open to Faculties, Research Scholars and UG/PG students. Fees are non-refundable once the registration process is complete.

**Mode:** Hybrid

**Registration Amount:** Rs. 236/- (Inclusive GST)

**Registration Link:** <https://events.vit.ac.in/>



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Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

# One day Workshop on Quantum Computing Essentials: A Hands-on Approach to Qubits, Gates, Circuits and Algorithms

**14<sup>th</sup> Mar, 2026**

*Organized by*

**Department of Quantum AI**

*School of Computer Science and  
Engineering*

*Vellore Institute of Technology, Vellore,  
India-632014*