06 NOVEMBER 2025 (1:00-4:30 PM)

- Introduction to Quantum Mechanics and Quantum Computing
- Quantum bits (qubits) and quantum gates
- Quantum circuits and algorithms (Deutsch-Jozsa, Grover's, etc.)

13 NOVEMBER 2025 (2:00-5:30 PM)

- Advanced quantum algorithms (Shor's, HHL, etc.)
- Quantum error correction and noise mitigation
- Quantum Machine Learning and Cryptography
- Recent advancements in Quantum Computing (Hardware)

20 NOVEMBER 2025 (1:00-5:00 PM)

- Introduction to Quantum Simulation and its importance
- Hands-on simulation sessions using popular quantum simulators (e.g., Qiskit Aer, Cirq Simulator)
- Applications of Quantum Computing in various fields (Chemistry, Optimization, Machine Learning, etc.)