About MAHE Bengaluru

Manipal Academy of Higher Education, Bengaluru is a premier academic institution committed to fostering innovation, excellence, and holistic development. A proud extension of MAHE, ranked among India's top private universities, the Bengaluru campus blends world-class infrastructure, cutting-edge programs, and a multidisciplinary approach to empower students for future challenges. With diverse offerings in Engineering, Management, Law, Arts, Health Sciences, and Design, MAHE Bengaluru nurtures a vibrant academic ecosystem that emphasizes research, industry integration, and global exposure. Guided by the ethos of "You Belong Here", the campus creates a dynamic learning environment where students thrive and excel.

About MIT Bengaluru

The Garden City of India, Bengaluru, is now home to a new engineering institution, "MIT Bengaluru", the latest constituent unit of Manipal Academy of Higher Education (MAHE). Manipal Institute of Technology Bengaluru, is a premier engineering institute offering cutting-edge programs in fields like CSE, IT, ECE, AI, Robotics, Cybersecurity, and Quantum Computing. The School of Computer Engineering(SoCE) at MIT Bengaluru is dedicated to fostering innovation and excellence in computing, cybersecurity, and emerging technologies. With cutting-edge labs and industry collaborations. SoCE offers B. Tech in Computer Science and Engineering with options for specializing in AI & ML, Quantum Computing, Robotics & AI, Cyber security, Data science, Gamification and Digital twinning. School offers masters programs which include Computer science and Engineering and Data science. The school also offers various Ph.D. programs in major areas to name a few Artificial Intelligence, Machine learning, Computer Vision, Pattern Recognition, Cloud Computing, Big Data Analytics, Edge Computing and Blockchain Technologies, and IoT Technologies

Chief Patrons

- Dr. Ramdas M Pai, Chancellor, MAHE
- Dr. Ranjan R. Pai, President, MAHE

Patrons

- Dr. H. S. Ballal, Pro-Chancellor, MAHE
- Lt. Gen. (Dr.) M. D. Venkatesh, Vice Chancellor, MAHE
- Prof. (Dr.) Narayana Sabhahit, Pro-Vice Chancellor, Technology and Science, MAHE
- Prof. (Dr.) Madhu Veeraraghavan, Pro-Vice-Chancellor, MAHE Bengaluru
- Prof. (Dr.) Raghavendra Prabhu P, Additional Registrar, MAHE Bengaluru Prof.
- (Dr.) Iven Jose, Director, MIT, Bengaluru

General Chair

Dr. Dayananda P, Professor & Dean, SoCE, MIT Bengaluru

MANIPAL INSTITUTE OF TECHNOLOGY
BENGALURU
(A constituent unit of MAHE, Manipal)

MANIPAL INSTITUTE OF TECHNOLOGY
BENGALURU

SCHOOL OF COMPUTER ENGINEERING

Organizes

International conference on
Next-Gen Quantum and Advanced Computing: Algorithms, Security, and Beyond (NQComp-2026)

Pre-Conference Workshop on

QUANTUM TECHNOLOGIES FOR SECURE AND TRUSTED COMPUTING

MARCH 4TH, 2026

SESSION 1: 10 AM - 12 PM
SESSION 2: 1 PM - 4 PM

About the Workshop

The one-day workshop on Quantum Computing is designed to introduce participants to the fascinating world of quantum technologies in a structured yet accessible way. Beginning with an overview of how quantum computing differs from classical computing, the workshop will explore fundamental principles such as qubits, superposition, and entanglement, followed by discussions on quantum hardware and current advancements. Participants will then be guided through key quantum algorithms like Shor's and Grover's, highlighting their transformative potential in cryptography, optimization, and machine learning. A hands-on session using platforms such as Qiskit and IBM Quantum Experience will allow attendees to build and run simple quantum circuits, bridging theory with practice. The day will conclude with an exploration of real-world applications in industries like finance, drug discovery, and logistics, alongside a discussion of challenges such as scalability and error correction. By the end of the workshop, participants will gain both conceptual clarity and practical exposure, equipping them with insights into how quantum computing is shaping the future of technology and research.

Expected Outcomes

- Conceptual understanding of quantum principles: Gain clarity on qubits, superposition, and entanglement, and how they differ from classical computing.
- Awareness of quantum hardware: Understand current advancements in quantum processors, hardware architectures, and their limitations.
- Knowledge of key quantum algorithms: Explore Shor's and Grover's algorithms and their transformative potential in cryptography, optimization, and machine learning.
- Hands-on experience with quantum platforms: Build and run simple quantum circuits using Qiskit and IBM Quantum Experience.
- Insight into real-world applications: Discover how quantum computing is being applied in finance, drug discovery, logistics, and other industries.

Resource Persons

- Dr. Abhishek Mani Shukla, Senior Research Associate, QNU Labs, Bengaluru
- Dr. Rohitkumar R. Upadhyay Cryptography Analyst, QNU Labs, Bengaluru

Conference Chairs

- Dr. Megha P Arakeri, Professor, MIT Bengaluru
- Dr. Shaleen Bhatnagar, Assistant Professor-Senior Scale, MIT Bengaluru

Faculty Coordinators

- Dr. Sowmya T, Assistant Professor, MIT Bengaluru
- Dr. Raghavendra M Devadas, Assistant Professor-Senior Scale, MIT Bengaluru

Payment Details

SCAN QR CODE FOR PAYMENT

1. 400/- for IEEE members and 500/- for non-IEEE members
2. The workshop accommodates two categories of participants: (i) Paper Presenters and (ii) Non-Paper Presenters.
3. Non-Paper Presenters must mandatorily enter "NIL" in the Paper ID and Paper Title fields in the payment form.
4. Payment and registration window will be open from 19/2/2026 to 28/2/2026

Registration Details

SCAN QR CODE FOR REGISTRATION

For any queries kindly contact,
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