



# NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

(An Institute of National Importance)

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## For Online Registration:

<https://forms.gle/mjXMjuPyk2vJ9NEy8>



## Online Payment Transfer Details:

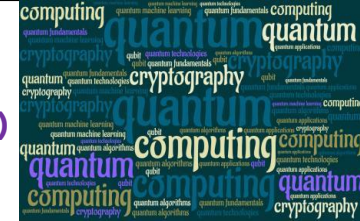
**Account No.:** 38027633250  
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## One Week Hybrid Workshop

on

**Quantum Computing & Algorithms (QCA-2024)**  
7<sup>th</sup> – 11<sup>th</sup> October 2024



**Organized By Department of Information Technology (IT)**

### About the Workshop:

This workshop is a comprehensive one-week program with an aim of empowering participants with the essential skills and knowledge required for the emerging field of quantum computing. The proposed workshop aims to bridge the gap between theoretical quantum mechanics and its practical application, providing participants with hands-on experience in quantum algorithmic development.

A workshop would be significantly useful to students, research scholars, faculty members & industry personnel for a comprehensive understanding of the theoretical concepts and practical applications of quantum algorithms along with insights into the latest advancements in quantum technology.

### Topics to be Covered:

- Quantum Fundamentals, Gates and Circuits
- Quantum Algorithmic Design Strategies
- Core Quantum Algorithms and Circuits
- Quantum Communication and Networks
- Quantum Cryptology and Machine Learning
- Hybrid Quantum-Classical Algorithms
- Quantum Hands-on Coding and Experience

### Target Participants:

Students (UG / PG / Ph.D.), Faculty Members, and Industry Person.

### Invited Speakers:

The programme will be conducted by the NIT Raipur faculty members. Academicians from IITs/NITs/IIITs and Industry Professionals are also invited to deliver expert lectures.

### Important Dates:

**Workshop Schedule** : 7<sup>th</sup>-11<sup>th</sup> October, 2024  
**Registration Starts** : 10<sup>th</sup> September, 2024  
**Registration Deadline** : 30<sup>th</sup> September, 2024  
**Registration Confirmation** : 5<sup>th</sup> October, 2024  
 (Note: Early intimation can be sent on request)

### Registration Fee Details:

Participants	Fees
NIT Raipur Students (UG/PG/PhD)	₹ 590/-
External Students (UG/PG/PhD)	₹ 1,180/-
Faculty/Industry Persons	₹ 5,900/-

(Registration amount is inclusive of 18% GST)

### Selection Process:

Selection will be based on first-come-first-serve basis and seats are limited to 50 participants.