Online STTP on

Quantum Computing and its Applications

A MODERN APPROACHES AND PRACTICES

From 24th June – 28th June 2024

REGISTRATION

FORM

Name: .....
Designation: .....
Organization: .....
Qualification: .....
Correspondence Address:
.....
.....

Tel. (O) ..... (R) .....
(M) .....
E-Mail: .....

Amount: ..... Date: ../../....
DD/NEFT/RTGS No
.....
Bank Details: .....
Accommodation Required: Yes / No
Date: ../../.... Place: .....

Form link

SCAN ME!

Note:
DD/NEFT/RTGS should be made in favor of Director, National Institute of Technology Raipur, payable at Raipur (CG), SBI bank, GCET Raipur Branch.

Signature:

For online Registration go through the link:
https://forms.gle/piKdWYk1jjYz2msG7
Payment should be made to the following:
Account No.: **38027633250**
Name: **Director, NIT Raipur**
IFSC: **SBIN002852**
Photocopies of registration form may be used.

Chief Patron

Prof. (Dr.) N.V. Ramana Rao
Director, NIT Raipur

Patron

Dr. Prabhat Diwan
Dean (R & C), NIT Raipur

Chairman

Dr. Sanjay Kumar,
HoD, Department of IT

Convener

Dr. Sanjay Kumar
Assoc. Prof., Department of IT

Coordinators

Dr. Rakesh Tripathi
Dr. Chandrashekar Jatoth

Address for Correspondence:

Coordinators:

Dr. Rakesh Tripathi

Designation: Associate Professor
Department of Information Technology
Email: rtripathi.it@nitrr.ac.in
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Dr. Chandrashekar Jatoth

Designation: Assistant Professor
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शिक्षा मंत्रालय
MINISTRY OF EDUCATION

Online STTP on

Quantum Computing and its Applications

A MODERN APPROACHES AND PRACTICES

From 24th June – 28th June 2024

Organized by

Department of Information Technology

National Institute of Technology – Raipur
492 010 (Chhattisgarh)

About the Institute

National Institute of Technology Raipur situated in the capital of Chhattisgarh, has proven to be "avant-grade' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our president Hon'ble Dr. Rajendra Prasad on 14th September 1956. the institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi and all metro cities by regular flights and is on the main Howrah-Mumbai railway route. The institute is 5 km from the Raipur railways station and 18 km from airport on NH-6, the Great Eastern Road.

About Department

The **Department of Information Technology** came into existence in year 2000. IT department is the study, research and workplace of approximately 300 students from the 28 states across India. The department provides an outstanding research environment and offers academic program leading to the award of B.Tech., M.Tech., and Ph.D. degree.

Organizer:

Department of Information Technology
NIT Raipur (CG) – 492 010, INDIA

Theme, Objectives & Scope

Aim of this STTP is to provide up-gradation of knowledge & skills for students/ research scholars/faculties/scientists involved in active research in the area of Quantum Computing & its Applications: Modern Approaches & Practices. The course will provide in depth exposure to them. The lectures will be delivered by distinguished experts from NIT and Software Industries. This one-week STTP course will include lectures, special case studies in the areas of application of Quantum Computing & its Applications along with the hands-on experiments using distributed platform such as IBM Quantum Computing suite.

Topics to be covered:

- An Introduction to Quantum Computing
- Quantum Information and Applications
- Quantum Computer technology & Architecture
- Quantum Algorithms Design Strategies
- Quantum Search, Quantum subroutines, Grover's Algorithm
- Quantum Fourier Transforms, Discrete logarithms, Shor's Algorithm, etc.
- Quantum Communication and Networking
- Quantum Cryptography and Key Distribution Protocols
- Quantum Machine Learning Applications in Cryptography
- Quantum and Block Chain applications.
- Hands on Experiences with Quantum Simulators and IBM Qiskit.

Targeted Participants

Students, research scholars and faculties of Engineering and basic sciences of educational institutes and employees of industries.

Resource Persons:

Academicians from IITs, NITs, & Industry are invited to deliver the lectures & to share their research experience in the innovative field of Quantum Computing. Experts from industry also invited as speaker for this programme.

Selection:

Since the number of seats is limited to 100, the selection will be made on first cum first basis. However, the preference will be given to the outside participants. Intimation regarding selection will be sent to the candidates by e-mail as per the scheduled date. E-Certificates will be issued to the participants only after attending the complete course.

Participants	Amount (in Rs inc. GST)
UG/PG/PhD Students	Rs. 590/-
Faculty & Industry Persons	Rs.1180/-

Application in the prescribed format with registration fee in the form of DD/NEFT/RTGS drawn in favor of "Director, NIT Raipur" must reach the coordinator on or before 14th June 2024. Candidates have to send scanned copy of the registration form along with scanned of DD/NEFT/RTGS transaction. Email address: jchandrashekar.it@nitrr.ac.in. Selected candidate will be informed by email/phone as per the schedule. Certificates will be issued to the participants only after attending the complete course.

Important Dates:

Last Date of Registration: 18th June 2024
Intimation of Acceptance: 19th June 2024
Workshop Dates:
24th June – 28th June 2024