



**PRESIDENCY**  
UNIVERSITY



PRESIDENCY SCHOOL OF INFORMATION SCIENCE

DRDO SPONSORED **NATIONAL SEMINAR**

# **Next Generation Digital Security in Defence with Quantum Artificial Intelligence and Decentralized Blockchain Solutions**

JANUARY 23-24, 2025



For Further Details:

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## Presidency University

Presidency University, Bengaluru, is a prestigious institution renowned for its commitment to providing quality education and holistic development to its students. Founded in 2013 by the Presidency Group of Institutions, the university has quickly emerged as a leading center for higher education in India. With a focus on innovation, research, and experiential learning, Presidency University has become a preferred destination for aspiring students seeking academic excellence and personal growth. The University takes pride in its academic programs that span diverse disciplines such as engineering, management, law, design, commerce, and media studies. The university follows a modern and industry-centric approach to education, blending theoretical knowledge with practical application. Highly qualified faculty members, with a perfect balance of academic expertise and industry experience, are instrumental in nurturing a conducive learning environment.

The university has earned several prestigious accolades, including being ranked 6th Best Emerging University in India by the Times Engineering Institute Survey and recognized as the Best University of the Year (South) by ASSOCHAM. It has also been featured among the Top 10 Promising Institutes in India for Engineering Education by Higher Education Review.

## Presidency School of Information Science

Presidency School of Information Science is designed to equip students with advanced skills in computer science and IT. The program covers essential areas like software development, artificial intelligence, machine learning, data structures, and cybersecurity, blending theoretical knowledge with practical experience. Delivered by experienced faculty, students benefit from hands-on projects, modern labs, and exposure to the latest technologies. The curriculum is designed to meet industry demands, preparing graduates for diverse roles such as software developers, IT consultants, and data scientists. With strong industry collaborations, students have access to internships and placement opportunities with top IT companies, ensuring they are well-prepared for successful careers in the fast-growing tech industry.

## Introduction

In an era where technological advancements are redefining global defense strategies, securing digital infrastructures has become paramount. The "Next Generation Digital Security in Defense with Quantum Artificial Intelligence and Decentralized Blockchain Solutions" course is designed to equip defense professionals with the cutting-edge knowledge needed to protect critical defense systems. This comprehensive course covers the importance of digital security, explores quantum algorithms and AI applications for threat detection, and delves into the transformative power of decentralized blockchain technologies. By integrating quantum computing with AI and blockchain, participants will gain insights into future trends and best practices for safeguarding privacy and data in an increasingly complex cyber threat landscape. Stay ahead of evolving security challenges and explore innovative solutions to defend national and global interests.

## Eligibility

Academicians, Faculty, Research Scholars, IT Professionals and Students.

## Registration

The applicants should enter their details in the following google form for registration on or before 19/01/2025.



### Registration Link

<https://forms.gle/YP71MuUhnzmzSMyt59>

## Boarding And Lodging

Participants are required to make their arrangements for boarding and lodging. Refreshments and lunch will be taken care of by the university.

## Registration Fee Details

₹ 200 for each participant  
(Online Payment only).



### Payment Link

<https://paytm.me/PYTMPS/n2ar5hP>

## Scheduled Dates

Last date for Registration: Jan 19, 2025 | Intimation of Selection: Jan 20, 2025 | Confirmation by participants: Jan 21, 2025

## Resource Persons



**Dr. Narayan Panigrahi**

Scientist, Group Head GIS  
Center for AI & Robotics  
DRDO, Bengaluru



**Dr. Rohit Ramakrishnan**

Postdoctoral Research Associate  
Quantum Computing Researcher  
IISC Centre for High Energy Physics  
Indian Institute of Science, Bengaluru



**Dr. Aswath Babu .H**

Assistant Professor in Physics  
Indian Institute of Information Technology  
Dharwad



**Dr. Jayakumar Vaithiyashankar**

CEO & Founder  
Anuthantra Pvt. Ltd., Bengaluru

## Course Topics

- Introduction to Quantum Computing
- Quantum Technology - Security and Beyond
- Quantum Cryptography and Quantum Key Distribution Protocols
- Quantum algorithms and their implications for security
- Cyber threat landscape in defence security protocols for quantum and blockchain systems
- Blockchain in Defence Security AI and Quantum Collaboration
- Policy and Future Directions

### CHIEF PATRON

**Dr. Nissar Ahmed**

Honorable Chancellor, Presidency University

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**Dr. Shakeera**

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Associate Dean, PSCS

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**Dr. Jai Singh W**

Professor & HOD, PSIS

**Dr. D. Sivabalaselvamani**

Associate Professor, PSIS

**Ms. D. Divyashree**

Assistant Professor, PSIS

