#### Course Relevance

The social impact of cyber safety and security is profound, shaping how individuals, businesses, and societies interact in the digital age. Ensuring cyber safety empowers individuals by protecting their personal information, safeguarding privacy, and preventing financial loss, which fosters trust in digital services such as online banking, e-commerce, and social media. At the community level, it encourages responsible online behavior, reducing cyberbullying, harassment, and misinformation. For businesses and governments, robust cybersecurity practices prevent data breaches and cyberattacks, ensuring the continuity of services and the protection of sensitive data, which strengthens public trust in institutions.

On a broader scale, cyber safety and security contribute to national security by defending critical infrastructure—such as healthcare, transportation, and energy systems—from cyber threats. The increasing reliance on technology for communication, education, and work makes these protections essential for societal well-being. By promoting safe online environments, cyber safety helps reduce digital divides, ensuring equitable access to secure digital spaces for all demographics. Ultimately, a secure cyber ecosystem fosters innovation, economic growth, and social stability.

#### **Course Objectives**

The course will present the fundamentals and the research aspects of Cyber Safety and Security. By empowering school students with the knowledge and skills to navigate the digital world safely," Cyber Safety and Security" aims to create a society that is more resilient against cyber threats, promotes responsible digital behavior, and contributes to a secure online environment for all.



### **Topics to be Covered**

- Cyber Safety and Security
- Cryptography
- · Cyber Crime and Cyber Safety
- · Intrusion Detection System
- Digital Forensic
- · IoT Security using Blockchain
- Bio-metric Security, Incident Response and Digital Forensics
- · Ethical Hacking and Responsible Social Media Usage
- Network Security
- · Fraud Detection and avoidance



## **Experts & Keynote Speakers**

- Vishal Kumar Director, Cyber Education, Quick Heal
- Manoj Jaysing Waghmare Architect Projects, Ouick Heal
- · Palvinder Singh Trainer, Quick Heal
- Prof. Ajoy Kumar Khan, Professor, Mizoram University
- Dr. Susmita Mondal, Assistant Professor, IDRBT
- · Prof. Ashok Kumar Turuk, NIT Rourkela
- Hemraj Saini, Professor, Dean Faculty Affairs, DITU
- · Mr. Manabhanjan Pradhan, CAMS
- Dr. Rakesh Tripathi, Associate Professor, NIT Raipur





# A Short-Term Course on

Cyber Safety and Security

Hybrid Mode (Online and Offline)

24th - 28th October 2024

Chairperson
Prof. Bibhudutta Sahoo

Coordinator

Dr. Ramesh Kumar Mohapatra

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING,
NATIONAL INSTITUTE OF TECHNOLOGY

ROURKELA AND

**Quick Heal** 

**Academy** 

