

A Faculty Development Program

Cyber security in AI-based Engineering Systems

[16 Dec - 21 Dec, 2024]

under the aegis of
Electronics & ICT Academy
IIT Roorkee



Supported by

Ministry of Electronics & Information
Technology
Government of India



Experts from Academia/Industry

Registration Fee

Fees: ₹ 500/participant, non refundable
(Applicable for all)

Note: Refund will be done in case of course cancellation
only, with in 20 working days

Certificates to participants by E&ICT
Academy IIT Roorkee

Online Mode: G H Raison College of
Engineering & Management, Nagpur

Why this course ?

Cyber security in AI-based engineering systems is pivotal for safeguarding data and ensuring system integrity. It encompasses an introduction to cyber security concepts, challenges, and strategies, focusing on cryptography and information security. The approach extends to cyber threat intelligence, AI-driven intrusion detection systems, and cyber forensic tools. AI-powered digital forensic solutions enhance investigations, while hands-on AI tools fortify defense mechanisms. Future trends promise advanced integration of AI in cyber security solutions.

Objectives of the course

- Introduction to Cyber Security & challenges, Strategies.
- Cryptography & Information Security.
- Cyber Threat Intelligence & Data Collection.
- AI-Driven Intrusion Detection System.
- AI with Cyber Security.
- AI-based Cyber Forensic Tools.
- AI-powered Digital Forensic Solutions.
- AI in Digital Forensic Investigation.
- Hands-on AI Tools for Cyber Security.
- Future Trends in AI and Cyber Security.

Course Features

- 40 Hours of Lectures & Hands-on (Hybrid Mode)
- Lectures from Expert Speakers, Hands-on from industry experts
- Expert talks from the industry
- Access to learning material and video lectures
- Certificate by E&ICT Academy IIT Roorkee

Focus Area

- Introduction to Cyber Security concepts and associated challenges
- Strategies for cryptography and information security
- Use of AI for cyber threat intelligence and data collection
- Implementation of AI-driven intrusion detection systems
- Development of AI-based cyber forensic tools and solutions
- Integration of AI in digital forensic investigations
- Hands-on training with AI tools for enhanced cyber security practices

Prerequisites

- No experience is required, but fundamental knowledge of any programming language would be helpful

Registration Link

<https://forms.gle/XYQrQ99rgwWBA2136>

How to make payment

<https://eict.iitr.ac.in/instruction-for-payment/>
Conference Code: EICTIITR-FDP-24-17

Principal Investigator

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Course Coordinators

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