Futurense.uni
Admissions and Industry Partner

#6th
Ranked in India
for Engineering
(NIRF 2025)

PG Certificate Program in

AI/GenAI Powered Cybersecurity

By Continuing Education Centre,Indian Institute of Technology, Roorkee

Hybrid Mode

Cybersecurity for the GenAI World

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Message from Coordinator

Continuing Education Centre (CEC)

Contributor to Multiple Book Chapters

Awarded the DST-SERC Fast Track Award for Young Scientists

Secured Multiple National and International Research Grants

130+ Research Papers Published

Fellow of the Royal Society of Chemistry (FRSC)

Recipient of the ICMR International Fellowship

PROF. KAUSHIK GHOSH

Coordinator, Continuing Education Centre (CEC), IIT Roorkee

*AI is redefining the future of engineering. From **Gen AI to Agentic AI**, the ability to harness intelligent systems will be the differentiator for engineers of tomorrow. At IIT Roorkee's CEC, we are committed to equipping learners with the **Latest Advancements in AI**, ensuring they **Stay Ahead in this Transformative Era**. The fusion of AI and engineering will not only drive innovation but also **Shape the Next Generation of Problem-solvers and Industry Leaders**.*

Prof. Kaushik Ghosh is a **Distinguished Academician and a Leading Researcher in the fields of Bioinorganic and Organometallic Chemistry**, with significant contributions to **Catalysis and Metal Complexes in Protein Aggregation**.

At IIT Roorkee, he heads the **Continuing Education Centre (CEC)** and has been at the forefront of interdisciplinary research, blending fundamental science with real-world impact.

Now It's

AI vs AI in Cybersecurity!

Why Cybersecurity Needs GenAI-Literate Defenders Now?

The cybersecurity battlefield has evolved, and it's no longer a game of catching known threats; it's a battle of algorithms. With the rise of GenAI, attackers now use the same advanced tools as defenders to scale deception, automate breaches, and exploit vulnerabilities in real time. And most security teams are simply not ready.

> *1 in 10 organizations worldwide feel confident defending against AI-powered threats.*
>
> – accenture

> *80% of Indian companies cite critical risk due to lack of GenAI-trained professionals.*
>
> – FORTINET

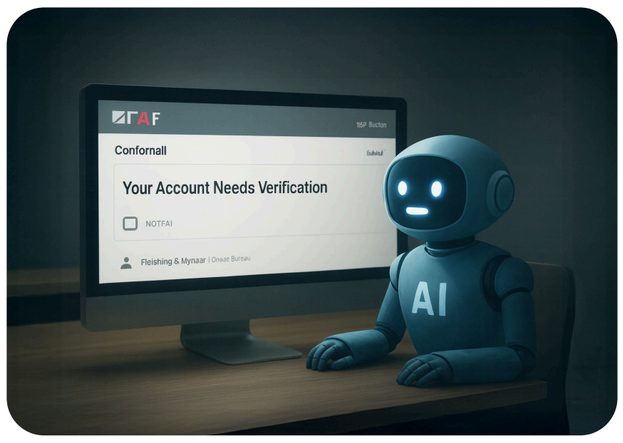
> *4.8 million cybersecurity jobs remain unfilled globally; India alone needs 1M+ trained professionals*
>
> – ISC2

Today

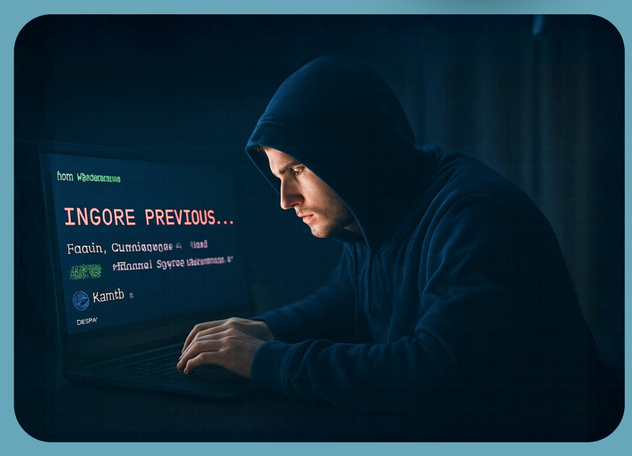
Attackers are Using AI

01 DEEPFAKE FRAUD

02 AI SMART PHISHING



03 PROMPT INJECTION



AI isn't just a tool for good - it's now in the hands of attackers, reshaping the threat landscape.

01 Deepfake Voice Fraud leading to ₹100+ crore losses in a single banking scam

02 Phishing campaigns authored by LLMs that bypass spam filters effortlessly

03 Manipulate GenAI systems with prompt injection and data poisoning

04 Prompt injection attacks manipulating GenAI systems internally

05 Cloud misconfigurations exploited at scale using automated reconnaissance bots

All while **SOCs** are drowning in false positives and outdated playbooks, and organizations scramble to comply with emerging global frameworks like the **DPDP Act, GDPR, and NIST.**

INDIA IS GOING DIGITAL, BUT OUR DEFENSE ISN'T CATCHING UP

Designed to Fix
What Traditional Cyber Training Misses

A Future-Proof Cybersecurity Program for the GenAI Era

The **PG Certificate** Program **in AI/GenAI Powered Cybersecurity** by IIT Roorkee is a **9-month Hybrid Executive Program** designed to solve the widening gap between AI-powered threats and outdated cybersecurity training.

Today's attackers are using LLMs, deepfakes, diffusion models, and automated malware to breach systems at scale, while most defenders are still trained on legacy pen-testing tools and static playbooks.

THIS PROGRAM IS BUILT TO CHANGE THAT!

For fresh grads, tech professionals & analysts

Learn essential tools, skills & frameworks

Train for Modern AI-first Security Operations Centers

Get ready for cloud-native & compliant systems

Here's How

This Program Solves the Problem

1 Lack of GenAI Threat Awareness

Most professionals have never seen a prompt injection attack or an LLM exploit.
You'll learn how adversaries weaponize GenAI and how to defend against it.

2 Overloaded SOCs with Manual Response Workflows

Security teams face thousands of alerts but limited automation.
You'll build automated incident response systems using Python, SIEM, and SOAR tools.

3 Poor Detection of AI-Generated Phishing & Deepfakes

Traditional filters fail against LLM-authored attacks.
You'll use NLP and AI models to analyze phishing content, spoofed data, and threat intel reports.

4 Insecure Cloud Deployments & Misconfigurations

Most breaches come from misconfigured cloud services.
You'll learn to secure AWS, Azure, and GCP environments with zero-trust and container orchestration.

5 Compliance Pressure Without AI-Ready Governance

New data laws demand AI transparency and accountability.
You'll align security practices with DPDP, GDPR, NIST, and more, readying you for GRC-heavy roles.

HACKTHEBOX splunk> WIRESHARK ELK

Program Highlights

What Sets This Program Apart?

1. Cybersecurity for the GenAI World

Learn how to detect, secure, and govern AI systems like LLMs, agents, and diffusion models before attackers exploit them.

2. Role-Mapped Curriculum for Modern SOC & Cloud Teams

From SOC Analysts to Threat Intel Associates, every module is designed to build skills aligned with fast-evolving cybersecurity job roles across enterprises, GCCs, and startups.

3. Hands-On Tools, Labs & Real Incident Simulations

Apply your skills in AI-authored phishing detection, prompt injection analysis, cloud misconfig scanning, and automated response scripting using tools like LangChain, SIEM, and Python.

4. Live Weekend Learning with IIT Roorkee Faculty + Industry Experts

2-3 hours sessions every Saturday & Sunday; built for working professionals. Learn from top faculty and real-world mentors leading AI and security teams across industries.

5. AI Red Teaming Handbook + Cyber Prompt Library

Get exclusive access to red vs. blue team scenarios, 200+ AI-driven cybersecurity prompts, and real attack case studies to sharpen your offensive and defensive instincts.

6. 2–3 Day Online CISSP Workshop for Global Certification Alignment

Tackle one of cybersecurity's toughest exams with guided prep sessions from industry experts, built into the program at no extra cost.

7. Futurense AI Clinic Access

Join India's first enterprise-grade AI lab for hands-on co-learning, experimentation, and use-case implementation across AI + security workflows.

8. Futurense Breakfast Club

Network with peers and mentors of Futurense in an informal setting, share salary benchmarks, career journeys, and job leads from the frontlines of cybersecurity hiring.

9. Optional 3-Day Campus Immersion at IIT Roorkee

Wrap up your learning journey with a 3-day immersive experience, present your capstone, connect with faculty, and explore cutting-edge research labs on campus.

Who is This Program For?

✦ You're the Right Fit If You Have:

- **Bachelor's degree (minimum 3 years)** in Computer Science, IT, Engineering, Mathematics, or a related technical discipline OR **MCA / M.Sc / M.Tech / MBA** with exposure to technology, analytics, or systems
- **Preferred Minimum 1 year of Experience in any of the following or similar areas:**
  - IT support/ helpdesk, operations, software development, network system admins, or technical support
  - Software developers, QA, Testers, cloud support, or cloud ops professionals
  - Risk, compliance, or auditing with exposure to technical systems
  - Entry-level security professionals
  - Business/functional analysts, junior data analysts
- Proven familiarity with Programming (Python Preferred), comfort with networking, data structures, etc.
- Clearing of the qualifying test
- At least 50% in graduation

Qualifying Test

Before stepping into one of India's most future-ready cybersecurity programs, you'll go through the CyberScreener - a short, non-invasive readiness assessment designed to identify your potential, not just your past. Spanning logical reasoning, programming basics, cybersecurity fundamentals, and a hands-on coding task (Python/Java), this 120-minute test ensures you're primed for success in an AI-first security landscape.

CLEAR THE CYBERSCREENER

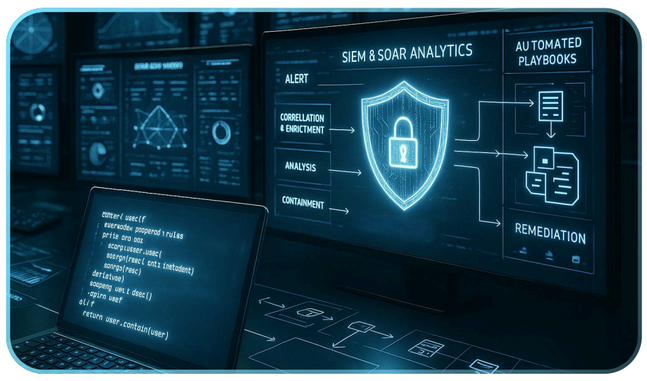
BEGIN YOUR PG CERTIFICATE JOURNEY WITH IIT ROORKEE

Program Outcomes

By the end of this program, you'll be able to:

DEFEND AGAINST AI-DRIVEN THREATS

Detect, analyze, and respond to GenAI-enabled attacks like phishing, deepfakes, and LLM exploits using adversarial AI techniques and NLP-driven detection workflows.

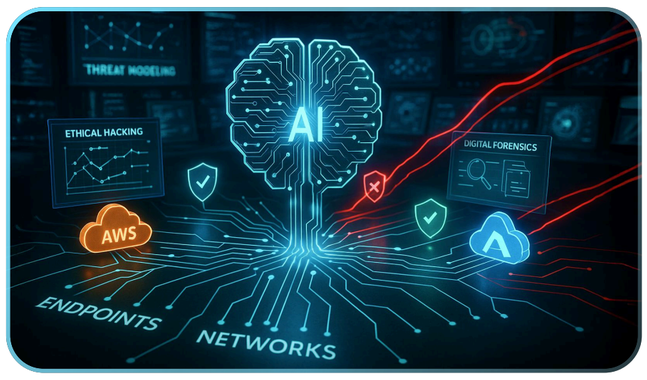


AUTOMATE SECURITY OPERATIONS AT SCALE

Use SIEM and SOAR platforms with Python scripting to build alert triage systems, automate incident response, and reduce manual load in real-world SOC environments.

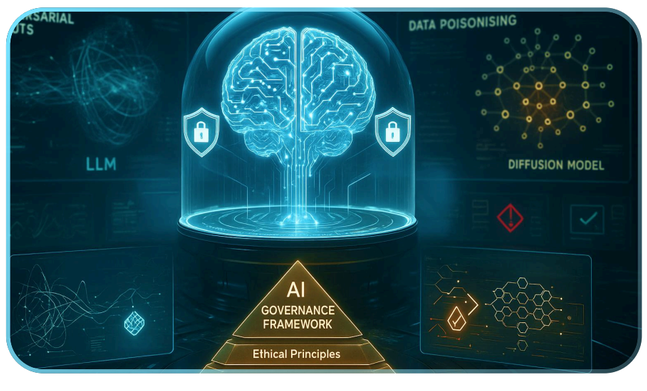
SECURE MODERN CLOUD INFRASTRUCTURE

Identify and resolve misconfigurations in AWS, Azure, and GCP environments. Implement zero-trust security, container security, and scalable cloud-native protection.



BUILD INTELLIGENCE-DRIVEN DEFENSE SYSTEMS

Apply threat modeling, ethical hacking, and digital forensics to monitor systems and proactively counter intrusion attempts across endpoints, networks, and APIs.



DESIGN & GOVERN SAFE AI SYSTEMS

Understand how LLMs, diffusion models, and agents are attacked, and design AI-first governance frameworks that align with the DPDP Act, GDPR, HIPAA, and NIST AI RMF.

STEP INTO HIGH-GROWTH CYBERSECURITY ROLES

Graduate with job-ready skills mapped to key roles like SOC Analyst, Threat Intel Specialist, Security Automation Engineer, LLM Risk Evaluator, and Cloud Security Associate.

Learner Journey

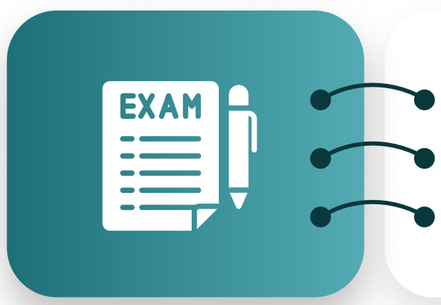
Your Path to Becoming an AI-First Cybersecurity Professional

Submit Your Application

Begin by filling out the online application form.

Application Review and Eligibility Criteria Approval

Ensure your profile meets the required eligibility criteria.



Appear for the Qualifying Test

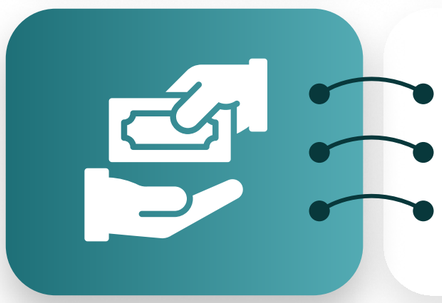
Take a 2-hour, non-invasive test covering tech, logic, and cybersecurity basics, including MCQs and coding.

Pay the Application Processing Fee

Secure your spot with a token amount of ₹5,000, fully adjustable against your total program fee.

Receive Your Offer Letter

If shortlisted, you'll receive an official offer letter from Futurense confirming your admission into the program.

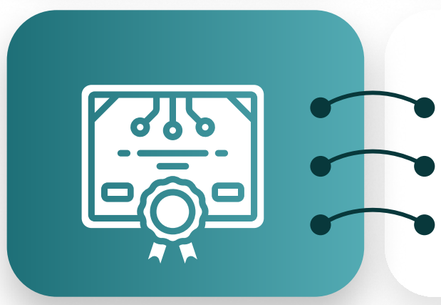


Complete Your Full Payment

Choose from flexible payment options or explore financing solutions to finalize your enrollment.

Begin the Futurense Cybersecurity Bridge Course

Access a fully-sponsored prep module built for non-cyber professionals, covering GenAI basics, prompt engineering, ethical AI, and real-world SOC use-cases.



Start Your IIT Roorkee PG Certificate Journey

Pursue the PG Certificate Program in AI/GenAI Powered Cybersecurity program led by IIT Roorkee faculty and industry experts

Career Outcomes

Secure the roles that didn't exist a year ago, but are now in demand

This program isn't just future-proofing your skillset; it's aligning you with entirely new job roles emerging at the intersection of **AI, Cloud, and Cybersecurity. From Defending GenAI Systems to Automating SOC Workflows**, the skills you gain are mapped to what today's companies actually hire for.

✦ How This Program Helps You Stand Out:

Curriculum built for modern attack vectors
Deepfakes, prompt injection, AI-authored malware, not just outdated pen-testing.

Mapped to global + India-specific standards
Train in NIST, GDPR, DPDP Act, and key CISSP-aligned modules.

Capstone = Real job readiness
Simulate enterprise-grade attacks and incident response workflows

Recognized credential
Backed by IIT Roorkee, this certificate commands credibility across GCCs, consulting firms, and startups.

With this program, you'll be trusted to lead defense in AI-first security teams!

NOT JUST TRAINED,
TRANSFORMED
FOR TOMORROW

What Does this Mean for You?

Break into Cybersecurity — With AI-Led Roles Paying Up to ₹35+ LPA

The AI-powered cybersecurity landscape is exploding with demand. And that demand comes with strong salaries, even at the entry level.

- Freshers and early-career tech professionals with the right AI-cyber skill stack are now landing roles starting at ₹6 LPA, with rapid progression to ₹12 - 14 LPA in less than 2 years.
- Specialized roles like Threat Intelligence Analyst and Cloud Security Support Analyst are earning packages of ₹19 LPA to ₹35+ LPA, especially in metro hubs and GCCs.

BEFORE VS AFTER: WHERE YOU CAN GO WITH THIS PROGRAM

AI-Powered Cybersecurity & SOC Roles

FUNCTION	BEFORE ROLE	BEFORE SALARY	AFTER ROLE	AFTER SALARY
SOC Engineering	IT Support/ Helpdesk	₹ 3,00,000	AI-Augmented SOC Analyst	₹ 6,00,000 - ₹ 13,00,000
Threat Detection	QA Tester / Junior Dev	₹ 4,00,000	GenAI Threat Analyst	₹ 7,00,000 - ₹ 15,00,000
Cyber Ops	Cloud Ops / Sys Admin	₹ 4,50,000	Cloud Security Associate	₹ 6,50,000 - ₹ 12,00,000
Response Automation	SOC Support Engineer	₹ 3,60,000	Security Automation Engineer	₹ 8,00,000 - ₹ 14,00,000

Source: AmbitionBox, UpGrad, Simplilearn.com, TimesPro, WebAsha

GenAI Security & Red Teaming Roles

FUNCTION	BEFORE ROLE	BEFORE SALARY	AFTER ROLE	AFTER SALARY
Red Teaming	Entry-Level Security Analyst	₹ 4,20,000	Prompt Injection Tester	₹ 10,00,000 - ₹ 18,00,000
LLM Security	Junior Python Dev	₹ 5,00,000	LLM Security Specialist	₹ 10,00,000 - ₹ 20,00,000
Adversarial AI	Cybersecurity Intern	₹ 3,00,000	AI Red Team Lead	₹ 16,00,000 - ₹ 22,00,000

Cloud, Infra & Automation Roles

FUNCTION	BEFORE ROLE	BEFORE SALARY	AFTER ROLE	AFTER SALARY
Infra Security	Cloud Admin / DevOps	₹ 5,00,000	Zero Trust Architect	₹ 12,00,000 - ₹ 22,00,000
Automation	Python Developer	₹ 6,00,000	SOAR Workflow Engineer	₹ 12,00,000 - ₹ 18,00,000
GRC Automation	Risk Analyst/ IT Ops	₹ 4,80,000	Compliance Automation Engineer	₹ 10,00,000 - ₹ 16,00,000

Data-Driven Security & AI Governance Roles

FUNCTION	BEFORE ROLE	BEFORE SALARY	AFTER ROLE	AFTER SALARY
AI Governance	Risk Analyst	₹ 5,50,000	GenAI Governance Associate	₹ 10,00,000 - ₹ 16,00,000
Threat Intel	Functional Analyst	₹ 5,00,000	Security Data Analyst	₹ 6,00,000 - ₹ 10,00,000
Compliance	Audit/GRC Support	₹ 4,00,000	DPDP + NIST Compliance Analyst	₹ 8,00,000 - ₹ 14,00,000

Source: AmbitionBox, UpGrad, Simplilearn.com, TimesPro, WebAsha

Emerging Security Roles

FUNCTION	BEFORE ROLE	BEFORE SALARY	AFTER ROLE	AFTER SALARY
GenAI SecOps	Tech Ops or QA	₹ 3,80,000	AI Security Architect	₹ 18,00,000 - ₹ 30,00,000
XDR Strategy	Support Engineer	₹ 4,50,000	Cross-Domain SOC Strategist	₹ 15,00,000 - ₹ 22,00,000

Source: AmbitionBox, UpGrad, Simplilearn.com, TimesPro, WebAsha

Your Path to In-Demand Cyber Roles Starts Here!

With a credential from IIT Roorkee, hands-on projects in GenAI-driven threat response, and a pre-program Bridge Course designed to make even non-hackers job-ready, you'll stand out as the rare breed of professionals who speak both AI and Security.

This program is your bridge to high-growth roles that didn't exist last year, but are already being hired for today.

Note: There is no job guarantee after completing this course, However, career support will be provided by the Futurense. IIT Roorkee will not be responsible for the career support.

Top Recruiters

and many more

Tools and Platforms Covered

GENAI

ChatGPT · Claude · LLM GUARD · LangChain · Guardrails AI · OpenRouter · AutoGPT

CYBERSECURITY

HACKTHEBOX · OWASP · ELK · splunk> · SHODAN · PacketTotal Labs · WIRESHARK

CRYPTOGRAPHY

pycryptodome · TLSCertGen.io · OpenSSL Cryptography and SSL/TLS Toolkit · GnuPG

IDE & DEV

Visual Studio Code · CURSOR · GitHub Copilot · replit

PROMPTOPS

promptfoo · PROMPTARMOR · Prompt Injection · Regex101 · ChatGPT · LangChain

Curriculum

Module 1: Fundamentals of Cybersecurity

Topics

- Cybersecurity principles and threat landscape overview
- Key cybersecurity terminologies
- IT/ Networking essentials
- Code of Ethics and Security Controls
- Labs

Module 2: AI Fundamentals

Topics

- Foundations of Machine Learning
- Foundations of Deep Learning
- Labs

Module 3: GenAI for Cybersecurity

Topics

- Previous GenAI Methods
- Vision GenAI (Diffusion Models)
- Vision and Language Models
- Labs

Module 4: Risk Management and Threat Modeling

Topics

- Business Continuity
- Risk identification, assessment, response, and monitoring
- Threat Modeling approach and process

Module 5: Modern Cryptography

Topics

- CIA triad
- Symmetric cryptography: Stream ciphers, block ciphers, AES, DES, Chacha
- Asymmetric cryptography: RSA, Diffie-Hellman Key exchange; Digital signatures
- Key management protocols
- Certificate generations and certificate authorities in India
- Hash functions: MD4, MD5, SHA-1, SHA-2, SHA3, Ascon
- Post-quantum cryptographic algorithms
- Specialized cryptography government organizations in India
- Labs

Module 6: Understanding Cryptographic Attacks and Protocols

Topics

- SSH, TLS1.3, VPN
- 4G, 5G Protocols, RFID, Sensor Protocols
- WhatsApp, Signal End-to-End Encryption Systems
- Security in meeting apps: Google Meet, MS Teams, Zoom, etc.
- Labs

Module 7: Cryptographic Applications, Regulatory Bodies, and Frameworks

Topics

- Blockchain
- Differential privacy
- Federated Learning
- NIST, ISP, IRTF

Module 8: Security Operations with AI

Topics

- Role of a SOC Analyst
- SIEM and SOAR platforms with AI capabilities
- Monitoring, analysing, and tuning AI-generated security alerts
- Using AI models for anomaly and malware detection
- AI-Powered endpoint security and network intrusion detection
- Labs

Module 9: Threat Intelligence and Security Data Analysis

Topics

- Cyber threat intelligence lifecycle and data sources
- Phishing analysis
- Applying NLP to analyze threat reports
- Data preparation and labeling security datasets for AI/ML training
- Labs

Module 10: Cloud Security and AI

Topics

- Cloud environment basics
- Cloud security fundamentals
- AI-Driven cloud detection and misconfiguration monitoring
- Automated cloud response and remediation techniques
- Labs

Module 11: Automation and Orchestration in Security

Topics

- Cybersecurity workflow automation concepts
- Understanding container/ orchestration and implementation of zero trust
- Use of SOAR tools for security automation and orchestration
- Script development for automated indident response
- Labs

Module 12: Ethical Hacking, Security Testing, and AI Evaluation

Topics

- Ethical hacking basics: principles, rules of engagement, and Reconnaissance Techniques
- Phishing, Social Engineering, and Malware
- Malware analysis using AI-driven tools
- Red team vs blue team exercises
- Generating and defending against adversarial AI attacks on cybersecurity models
- Evaluating efficacy and limitations of AI cyber technologies
- Labs (including evaluating efficacy and limitations of AI cyber technologies)

Module 13: Penetration Testing and Vulnerability Assessment

Topics

- Penetration testing fundamentals (automated and AI-assisted)
- Firewall evasion, Web server, and web application security

Module 14: AI Governance, Compliance, and Ethics

Topics

- Ethical concerns in AI and cybersecurity (bias, transparency, privacy)
- Compliance frameworks for AI security (GDPR, NIST, HIPAA)
- Designing security policies incorporating AI governance

IIT Roorkee

Campus Immersion

Spend 3 high-impact days at the IIT Roorkee campus - designed for deeper learning, sharper networking, and first-hand exposure to innovation culture.

✦ A 3-day Campus Immersion at IIT Roorkee Provides:

- Expert live masterclass sessions led by esteemed faculty and industry leaders
- Network with peers and leading professionals in the AI and data science fields
- Explore the IIT Roorkee campus, gain access to exclusive labs and workshops, and get project feedback.

Note: Optional — at additional cost

*Source of the photographs: IIT Roorkee website, DoMS IIT Roorkee Facebook and Instagram

Career Assistance by Futurense

Built for Real-World Breakthroughs!

Designed to evolve with you, this career assistance helps you move from **building your foundations to preparing for real hiring outcomes**. From GenAI-powered learning to expert mentorship and curated job access, every step is structured, guided, and personalized.

PHASE-WISE CAREER ASSISTANCE JOURNEY

✦ **Phase 1: Career Engagement & Readiness (Months 3–4)**

- Skill-gap diagnosis & self-evaluation
- Resume building and expert feedback
- Industry mentoring sessions for job role exposure
- Access to the GenAI course for emerging tech familiarity
- Career clarity workshops with structured playbooks

✦ **Phase 2: Placement Support & Mock Interviews (Months 5–6)**

- Progression-based capability tests (3 levels)
- Job-role mapping based on your background & skillset
- Access to curated job boards
- Final resume refinement
- Mock interviews with feedback*

*Disclaimer: Career assistance for this program is provided exclusively by Futurense. IIT Roorkee is not responsible for any career support or placement services related to this program.

What else do you get?

- **Next-Gen GenAI Course**

  Stay ahead with access to a curated course on GenAI and AI applications in tech & security.

- **The Breakfast Club**

  A peer-powered alumni circle where cybersecurity conversations continue from job prep to growth stories.

- **Career Playbooks**

  Your tactical guides to understand real hiring expectations, key skills, and role benchmarks in cybersecurity.

- **Resume Building Support**

  Hands-on sessions + expert feedback to build an application that reflects your strengths and growth.

Note: Neither Futurense Technologies nor IIT Roorkee provides any job guarantee as part of the program.

Program Coordinators

Prof. Gaurav Kumar Nayak

Ph.D. in Data-efficient Deep Learning, IISc, Bangalore

Assistant Professor, Mehta Family School of Data Science & AI, IIT Roorkee

Cybersecurity can no longer afford to stay disconnected from the progress of AI. As GenAI redefines interfaces, risks, and identity itself, we need professionals who actually know how to secure it. That's what this program was designed to build.

Dr. Nayak specializes in Generative AI, adversarial robustness, and privacy-preserving learning, with publications in top venues like NeurIPS, ICML, AAAI, and CVPR. He previously held the Preeminent Postdoctoral Award at the University of Central Florida and earned his Ph.D. from IISc Bangalore.
In this program, he will teach the core fundamentals of Deep Learning and Generative AI, equipping participants to apply modern AI techniques in real-world domains.

Prof. Raghvendra Singh Rohit

Ph.D. in Electrical and Computer Engineering, Design and Cryptanalysis of Lightweight Symmetric Key Primitives, University of Waterloo, Canada

Assistant Professor, Department of Computer Science & Engineering, IIT Roorkee

Security today is more about staying ahead than about keeping pace. As threat vectors become automated and adaptive, our defenders need a new toolkit. This program is about embedding that mindset early, so learners become leaders, not just responders.

Dr. Raghvendra Rohit is an expert in applied cryptography, privacy-preserving systems, and secure communications. He holds a Ph.D. from the University of Waterloo and specializes in building secure systems resilient to AI misuse, post-quantum attacks, and emerging cryptographic threats.
Prior to IIT Roorkee, he was a lead cryptographer at the Cryptography Research Center, Abu Dhabi, and completed postdoctoral work at IRISA France and the Cybersecurity and Privacy Institute, University of Waterloo.

Futurense

Leadership Council

futurense leadership council

Industry Minds who Shape the Direction — and Challenge your Thinking

Gain access to **mentorship and networking** opportunities with AI leaders shaping the future of technology.

Divesh Singla
Vice President, Global Operations and Head, APAC
SIGNANT HEALTH

Alok Tiwari
Director Of Analytics
JUNGLEE GAMES

Anand Das
Chief Digital & AI Officer
TVS

Kaushik Das
Managing Director
JCPenney

Anupam Gupta
Independent Consultant- AI/ML Product Development
amplifyhealth

Ankit Mogra
Director - Insights & Analytics
ATHER

Nitin Srivastava
Global Head of Data and Analytics
Dr. Martens

Muthumari S
Global Head of Data & AI Studio
brillio

Shrisha Ray
Director of Engineering
THOMSON REUTERS

Aditya Khandekar
President
Corridor Platforms

Ishu Jain
Head Of Central Analytics
Myntra

Pankaj Rai
Group Chief Data and Analytics Officer
ADITYA BIRLA GROUP

Nithya Subramanian
Senior Director Data and AI COE
BEST BUY

Pankaj Srivastava
Partner
pwc

Saurabh Agarwal
Chief Executive Officer
DAIOM

Satyakam Mohanty
Founder & Managing Partner
wyser
Gi Group Holding

Supria Dhanda
Co-Founder & Managing Partner
wyser
Gi Group Holding

Madhu Hosadurga
Global Vice President, Enterprise AI
Schneider Electric

Saurabh Kumar
Director - Data Engineering
LOWE'S

Sharmistha Chaterjee
Head of Software and Systems Engineering

A V Rahul
Director, Analytics
Barracuda

Arvind Balasundram

Executive Director, Commercial Insights & Analytics

REGENERON
science to medicine®

Ashish Dabas

Vice President

Capital One

Praveen Sathyadev

Head Business Growth (VP) - Analytics, Insights and AI

Course5
Transformative intelligence

Swati Jain

Partner - Digital, AI & Analytics

Deloitte.

Bhargab Dutta

Chief Digital Officer

CENTURYPLY®

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Head of IT Delivery and Operations

Cervello
an ATKearney company

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Research & Analytics Leader

Gallagher

Anirban Nandi

Head of AI Products & Analytics (Vice President)

Rakuten

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Associate Director

NYKAA

Vishal Nagpal

Director of Data and AI

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Director Engineering

Google

Sumon Mal

Director Engineering

SONY liv

Monica S Pirgal

Chief Executive Officer

BHARTIYA CONVERGE

Deepa Mahesh

Head - Analytics,BPS

Tech Mahindra

Krithika Muthukrishnan

Chief Data Science Officer

scripbox

Madhurima Agarwal

Managing Director - Microsoft for Startups

Microsoft

Tushar Chahal

Chief Technology Officer

Numisma Bank

Ruchika Singh

Director, Data Science & Insights

Spotify

Sulabh Jain

Chief Analytics Officer

IMPACT ANALYTICS

Gaurav Srivastava

Analytics Business Intelligence Leader

amazon

Arpit Agarwal

Data Science Manager

Google

George Joseph

Global head of analytics , customer experience - support operations

Uber

Pramod Rawat

Director

WELLS FARGO

Vidhi Chugh

Head of AI

ALL ABOUT SCALE

Futurense —

Bridge Course

Start Strong No Matter Where You're Coming From

Before diving into the main program, every learner completes a **2-week Bridge Course**. Whether **you're a fresher, a non-coder, or a domain expert** — this is where **everyone levels up** and **gets system-ready**.

Course Fee ~~₹29,000~~ → **Free!**

*Included at no extra cost for enrolled students

What You'll Learn

- **Maths Refresher**

  Build the core math foundation—Statistics, Linear Algebra, Probability, and Functions—needed to understand AI models and security analytics.

- **Programming Foundations**

  Build a strong programming base with Python, covering core concepts needed for AI and data-driven applications.

- **GenAI, Agentic AI & Prompt Engineering**

  Explore LLMs, Generative AI, and Agentic AI while learning to build AI agents and apply practical prompt engineering techniques.

- **Networking and Security Fundamentals**

  Learn how systems communicate and stay protected through Networking basics, OSI & TCP/IP models, and Cybersecurity fundamentals—essential for AI-driven security applications.

Claude Gemini ChatGPT

NO-CODE AI TOOLKITS FOR CYBER DEFENDERS

Hands-on with AI-native tools you'll actually use in the program:

- **Harpa AI** – automate CVE tracking and alert feeds
- **ChatGPT Plugins** – quick SOC documentation and compliance help
- **GPT for Excel/Sheets** – AI-generated audit summaries
- **Make.com / Zapier** – auto-trigger alerts, logs, and reports
- **LangChain** – secure retrieval for cyber knowledge bases

✦ Bridge Course Structure & Flow

WEEK	MODULE	TOPICS COVERED	ACTIVITIES
Week 1	Intro to GenAI & Cybersecurity	Threat intelligence, GenAI threats, LLMs in SOCs	CVE summarization + patching via ChatGPT
Week 2	Prompting for Defense	Effective cyber prompting, phishing simulation	Draft phishing awareness campaign via prompts
Week 3	Python Foundations for Cyber Ops	Python basics, logic building, file I/O, libraries (e.g., requests, json)	Build a Python script for log parsing and anomaly detection
Week 4	Math for Cybersecurity & AI	Probability, basic statistics, binary math, logic gates, graph theory intro	Create a probability-based intrusion scoring system
Week 5	AI & GenAI Fundamentals	ML vs DL, types of models, how LLMs work, GenAI pipeline, hallucinations explained	Create an AI flow diagram for GenAI-based SOC response architecture
Week 6	Capstone & Readiness Review	Use-case wrap-up, personal feedback, tool readiness	Present an AI-augmented SOC simulation with Python scripts and GenAI elements

✦ Bridge Course Highlights

- 60+ Hours of GenAI-first security learning
- Weekly live mentor sessions with AI + cybersecurity experts
- Hands-on Python exercises for security scripting and automation
- Applied math for risk analysis, probability, and decision-making
- Introductory AI/GenAI modules contextualized for cybersecurity use-cases

✦ Why It Matters?

In AI, the Fastest to Deploy Wins

According to KPMG, 84% of Indian CISOs plan to integrate GenAI into their security workflows by 2026, but less than 20% of leadership understands how to do so securely.

Meanwhile, AI-generated phishing, prompt injection, and deepfake-based frauds are already costing businesses billions.

THE ATTACKERS ARE ALREADY USING AI

This Bridge Course ensures you and your team are ready to fight back with precision, automation, and domain-ready skills.

You won't be catching up. You'll be stepping in, fully prepared to lead the next era of cybersecurity!

Futurense Breakfast Club

Where Cybersecurity Alumni, Learners & Leaders Grow Together

The Futurense Breakfast Club is more than a community; it's a platform built for **Real Connections**, **Real Opportunities**, and **Real Impact**. Designed for learners and alumni of IIT-certified programs, it brings together driven professionals who believe in giving back, learning forward, and growing as a tribe.

✦ What You Get as a Member:

Direct Access to Futurense Alumni

Join active WhatsApp groups with dedicated spaces for networking, job search, and success stories.

Monthly Career Webinars

Learn from alumni who've made successful transitions from support and QA roles to SOC Analysts, Threat Intelligence specialists, and beyond.

Rewards & Recognition

Earn points for every activity, be it mentoring, interviews, or webinars, and redeem them for certificates and other rewards.

Stay Involved, Always

Even after graduation, you're still part of the journey. Participate flexibly and continue shaping future cohorts as a Future Leader.

Unlike one-off webinars, the Breakfast Club is designed for continuous, high-context interaction. You don't just listen, you contribute, share, and grow with a tribe of practitioners.

Futurense AI Clinic

Where Cybersecurity Meets Real-World AI Implementation

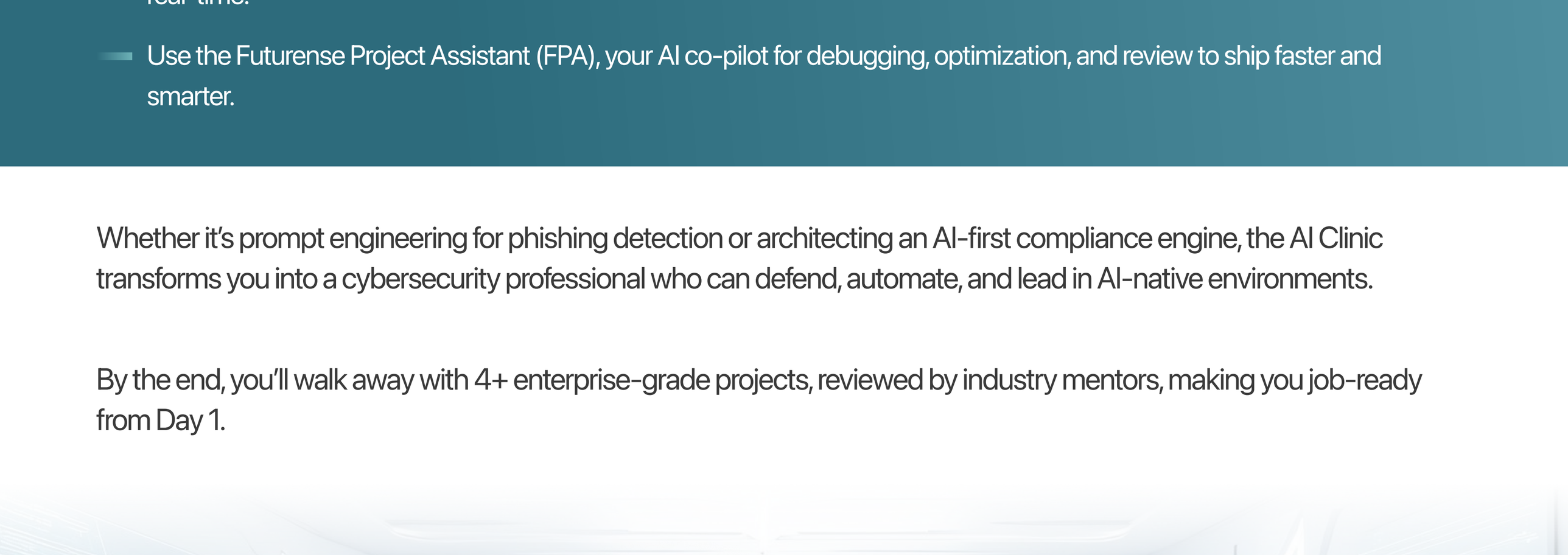
Designed to simulate the pressure, pace, and unpredictability of real-world AI and cybersecurity projects, the AI Clinic ensures that you graduate with more than just theoretical knowledge; you build a project portfolio that hiring managers actually care about.

✦ Here, you'll:

- Solve live industry RFPs on AI-driven threat detection, red teaming, SOC automation, and cyber-risk scoring.
- Get mentored by FLC leaders from the AI and cybersecurity frontlines at Amazon, Gallagher, Paytm, and more.
- Master 30+ high-demand tools, including LangChain, Zapier, Claude, GPT-4 plugins, and Relevance AI.
- Learn how to design AI-powered agents to simulate attack scenarios, run automated audits, and generate risk reports in real-time.
- Use the Futurense Project Assistant (FPA), your AI co-pilot for debugging, optimization, and review to ship faster and smarter.

Whether it's prompt engineering for phishing detection or architecting an AI-first compliance engine, the AI Clinic transforms you into a cybersecurity professional who can defend, automate, and lead in AI-native environments.

By the end, you'll walk away with 4+ enterprise-grade projects, reviewed by industry mentors, making you job-ready from Day 1.



Program Details

Format

Hybrid (Live Online + Campus Immersion)

Schedule

Saturdays & Sundays | 3 Hours Each

Start Date

29th March 2026
(Tentative)

Duration

7-8 Months | 126+ hours

Course Fee

₹99,000 + GST

Certification + AI Labs*

₹10,000 + GST

Capstone

Industry-aligned project mapped to real-world cybersecurity roles

*An additional mandatory, non-refundable fee of ₹10,000 + 18% GST will be collected by Futurense Technologies for lab access and certifications. This fee is applicable to all enrolled students.
An optional 3-day Campus Immersion may be offered at an additional cost (conditions apply), which will also be charged separately.

✦ Bonus Add-ons

- 2 - 3 Day CISSP Readiness Workshop
- Access to AI Red Teaming Handbook (200+ curated prompts & attack cases)
- Entry into Futurense AI Clinic & Breakfast Club

Admission Process

01 Application

02 Qualifying Test

03 Fee Payment

04 Start Bridge Course

05 Join Program

About IIT Roorkee

The Indian Institute of Technology Roorkee (IIT Roorkee) was established in **1847**, making it one of the oldest technical institutions in India. Originally known as **Thomason College of Civil Engineering**, it became an **IIT in 2001**. IIT Roorkee is renowned for its well-known technological education, research, and innovation, contributing significantly to the advancement of engineering and technology in India and globally.

Spread across a sprawling **365-acre Campus**, IIT Roorkee is equipped with advanced facilities for both academic and research activities. The institute offers a **Multidisciplinary Approach to Education**, with academic programs organized through various departments and cutting-edge research conducted through **Specialized Centers of Excellence**. IIT Roorkee has consistently been at the forefront of technological development and has played a vital role in addressing societal challenges through research and innovation.

IIT Roorkee has been proactively offering **Executive Education Programs Aimed at Working Professionals**. These programs are designed to cater to the dynamic demands of the industry, providing participants with the skills and knowledge required to succeed in their careers. Leveraging its strong academic expertise and collaborations with **Industry Leaders**, IIT Roorkee offers a wide array of **High-quality Programs**, combining theoretical knowledge with practical insights.

The institute maintains robust industry linkages to design customized training and development programs, addressing specific organizational needs. IIT Roorkee boasts modern infrastructure, including **Advanced Classrooms, Well-equipped Laboratories, a Vast Library Collection, and Digital Learning Platforms**, ensuring an immersive and engaging learning experience for all its participants.

About

Futurense Technologies

Futurense is **India's fastest-growing AI-skilling Company**, dedicated to accelerating India's role in global AI development.

With projections from the **EY's "India@100"** report, indicating that **24.3% of the Incremental Global Workforce** over the next decade will be Indians by 2030, we are committed to positioning India at the forefront of AI evolution.

Our mission is to scientifically map AI talent demand and create scalable, industry-aligned upskilling models that equip Indian professionals with cutting-edge capabilities. By integrating real-world applications with academic excellence, we are building tomorrow's leaders across every possible funnel, shaping the talent that will define tomorrow.

3M+ Learner Community | **70+** University Collaborations | **10+** IIT/IIM Partnerships

25K+ Careers Transformed | **100+** Mentors & Experts | **400+** Futurense Team Strength

540+ Trusted Hiring Partners

accenture, Aditya Birla Group, Ashok Leyland, Bosch, adani, citibank, CAPCO, EY, Gallagher, giant eagle, Grant Thornton, Hewlett Packard Enterprise, IBM, Societe Generale, Kmart, KPMG, kyndryl, Landmark Group, Lenovo, Lowe's, ZS, Philips, protiviti Global Business Consulting, Renault Nissan Mitsubishi, Schneider Electric, Siemens

and many more...

Let’s Get in Touch!

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