



**Post Graduate Certificate in
CyberSecurity with
Generative AI**

4 Months | Online/Offline Program

Welcome Message

Welcome to Datacrew, your gateway to excellence in the world of Cybersecurity with Generative AI!

We are thrilled to have you join our vibrant community of aspiring cybersecurity professionals and technology enthusiasts. At Datacrew, we don't just offer courses; we provide pathways. Pathways to enhance your knowledge, sharpen your skills, and build a successful career in the fast-paced and ever-evolving field of cybersecurity.

Our mission is to equip you with the expertise, confidence, and practical skills necessary to excel in the critical domain of cybersecurity. Whether you're focused on network security, ethical hacking, threat analysis, or mastering the latest advancements in Generative AI, we're here to guide you every step of the way.

At Datacrew, we take immense pride in being a leader in IT Security Training. In a remarkably short time, we have established ourselves as the premier destination for those looking to shape their future in cybersecurity. Our journey is driven by a commitment to innovation and excellence. We are on a relentless mission to empower learners like you to become industry-ready experts, capable of safeguarding digital landscapes, securing critical infrastructures, and leveraging Generative AI to stay ahead of emerging threats.



DATA CREW EDUCATION INDIA PVT LTD

INDIA'S LEADING PROFESSIONAL ED-TECH
COMPANY



20+

Top Ranked
Programs



1000+

Learners



450+

Hiring Partners



10k +

Hours of Learning
Delivered



25+

Industry Experts



12.5LPA

Highest Fresher Salary



Best Ed-tech
Platform to Start
Your Career with...

PROGRAM DELIVERY LEARNING PATH

Learn Fundamentals



Cybersecurity with Gen AI



**PG Certificate of Proficiency
in Cybersecurity with Gen AI**



Program Overview: Tailored Learning Pathways

This program offers flexible learning paths, designed to align with the candidate's background and professional goals.

For Freshers:

Candidates who are new to the field or lack prior certification can enroll in our comprehensive PG Certification in Cybersecurity with Generative AI. This 4-month intensive course provides a robust foundation in essential cybersecurity concepts and practices, including network security, ethical hacking, threat detection, cryptography, and more. Additionally, students will explore the integration of Generative AI in cybersecurity, learning how to leverage AI for advanced threat analysis and response. With unlimited interview opportunities until they secure their first placement, this program ensures a successful start to your career as a cybersecurity professional.

For Experienced Professionals:

Individuals who have prior experience in the tech industry but wish to enhance their skills or transition into Cybersecurity can also benefit from this course. Our curriculum is designed to deepen your expertise, introduce you to cutting-edge tools and practices in the cybersecurity domain, and help you stay ahead in a rapidly evolving field. The course offers the flexibility to focus on areas that align with your career goals, including advanced topics like AI-driven threat intelligence, penetration testing, and cloud security. Gain the credentials and confidence needed to take on more specialized and advanced roles in cybersecurity.

PROGRAM HIGHLIGHTS

To empower professionals with essential cybersecurity skills, Datacrew Education has designed a comprehensive 4-month Post Graduate Certification in Cybersecurity with Generative AI. This program provides participants with a deep understanding of the critical aspects of cybersecurity, covering the full spectrum of modern security practices and technologies. The curriculum emphasizes practical, industry-relevant skills in key areas such as network security, ethical hacking, cryptography, threat detection, incident response, and the integration of Generative AI for advanced threat analysis. By focusing on hands-on experience and real-world projects, this program ensures that participants are well-prepared to excel in the cybersecurity industry and become job-ready upon completion.



**4-Months
Program**



**112 Tech hrs +
Soft Skills 48 hrs
of total training**



**Unlimited
Interviews till
first Placement**



**PG Certificate from
IBM & Microsoft**



WHO IS THIS PROGRAM FOR?

- ★ Technology professionals who aspire to join cybersecurity teams.
- ★ Professionals seeking to develop a unique skill set in cybersecurity, including threat detection, ethical hacking, and network security.
- ★ Individuals who want to become experts in protecting and securing digital infrastructures against cyber threats.
- ★ Technology leaders and managers aiming to lead cybersecurity initiatives within their organizations.
- ★ Early-career professionals looking to build robust cybersecurity and threat analysis skills.

AFTER THIS PROGRAM, YOU WILL

- ★ Become a cybersecurity expert capable of designing and implementing robust security architectures and systems.
- ★ Perform the role of a cybersecurity professional, proficient in network security, ethical hacking, cryptography, and Generative AI-driven threat analysis.
- ★ Qualify for roles such as Cybersecurity Analyst, Ethical Hacker, Information Security Manager, Network Security Engineer, Security Consultant, Cybersecurity Architect, and more.
- ★ Gain practical, industry-relevant skills that will make you job-ready and competitive in the cybersecurity job market.



CAREER JOURNEY @DATACREW

Web Portfolio

Our students are trained to build web portfolios to showcase relevant skills, projects, videos, etc.



Resume Preparation

We make you interview ready by helping you choose the most relevant details to be added in every section of your resume



Mock Interviews

Mock interviews are conducted to familiarise students with the actual interview. They are asked technical & HR questions frequently asked by recruiters



Industry Projects

15+ industry projects to make you ready for your dream job



Intensive Practical Sessions

80 practical: 20 theory approach gives you an exposure to real world IT projects & case studies before course completion



3 A Rule

Follow Our 3A Rule Mandatory for students to follow Attendance, Assessment and Assignment model with a minimum 90% score in each



COURSE CURRICULUM

CYBERSECURITY WITH

GENERATIVE AI

Module 1

Introduction to Ethical Hacking

This module introduces the core concepts of ethical hacking and information security, establishing a foundation for more advanced topics

- What is Cyber Security?
- Importance of Cyber Security
- Key Concepts and Terminology
- Types of Cyber Threats and Attacks
- Understanding Cyber Security Frameworks (NIST, ISO 27001, etc.)

Module 2

Foot Printing and Reconnaissance

This module focuses on the initial phase of ethical hacking—gathering information about the target.

- Ethical Hacking Concepts
- Foot printing Techniques and Tools
- Reconnaissance and Information Gathering
- Vulnerability Scanning and Exploitation
- Hands-on Labs: Using Nmap, Metasploit, etc.



Module 3

Scanning Networks and Enumeration

This module delves into network scanning techniques and tools, as well as enumeration processes.

- Network Scanning Techniques
- Scanning Tools (Nmap, Nessus, OpenVAS)
- Identifying and Exploiting Network Vulnerabilities
- Mitigation Techniques
- Hands-on Labs: Network Scanning Exercises

Module 4

Vulnerability Analysis and System Hacking

Learn to identify security weaknesses and exploit vulnerabilities in systems and networks.

Vulnerability Assessment Methodologies and Tools

- Types of vulnerability assessments (network, web, mobile).
- Automated vs. manual vulnerability assessments.
- Prioritizing vulnerabilities based on risk.
- Nessus, OpenVAS, and Qualys.
- Web vulnerability scanners (Burp Suite, OWASP ZAP).

System Hacking Methodologies

- Exploiting system vulnerabilities using common attack vectors.
- Password cracking (brute force, dictionary attacks).
- Privilege escalation techniques.



Module 5

Malware Threats and Sniffing

This module covers different types of malware and sniffing techniques used by attackers.

Introduction to Malware

- Definitions and types (viruses, worms, trojans, ransomware).
- Advanced Persistent Threats (APTs) and fileless malware.
- Malware lifecycle and propagation methods.
- Static vs. dynamic malware analysis.
- Tools: IDA Pro, OllyDbg, and Wireshark.
- Identifying Indicators of Compromise (IoCs).

Sniffing Techniques

- Packet sniffing basics and techniques.
- Tools: Wireshark, tcpdump, and Cain & Abel.
- ARP spoofing, DNS poisoning, and session hijacking.

Module 6

Social Engineering, Denial of Services and Session Hijacking

This module covers human-level vulnerabilities, DoS/DDoS attacks, and session hijacking techniques.

Social Engineering Concepts

- Psychological manipulation and tactics.
- Phishing, pretexting, baiting, and tailgating.
- Social engineering frameworks (SEToolkit).

Denial of Service (DoS) and Distributed DoS (DDoS) Attacks

- Techniques for launching DoS/DDoS attacks.
- Tools: LOIC, HOIC, and slow Loris.
- Impact analysis and case studies.

Session Hijacking Techniques

- Understanding session management and authentication.
- Session fixation, side jacking, and cross-site scripting (XSS).
- Countermeasures: HTTPS, secure cookies, and session timeouts.

Module 7

Evading IDS, Firewalls, and Honeypots

This module focuses on techniques to bypass security defenses like IDS, firewalls, and honeypots.

- Introduction to Firewalls
- Types of Firewalls (Packet Filtering, Stateful, Proxy, etc.)
- Firewall Policies and Rule Sets
- Configuring and Managing Firewalls
- Hands-on Labs: Firewall Configuration

Module 8

Hacking Web Servers

This module covers methods to attack and secure web servers.

- Introduction to Web Servers
- Common Web Server Vulnerabilities
- Hardening Web Servers
- Securing HTTP Headers
- Hands-on Labs: Securing Apache and Nginx Servers

Module 9

Hacking Web Applications

This module delves into attacking and securing web applications.

- Introduction to Web and Mobile App Security
- Common Vulnerabilities (OWASP Top 10)
- Secure Coding Practices
- Security Testing Tools (Burp Suite, OWASP ZAP)
- Hands-on Labs: Web and Mobile Application Penetration Testing

Module 10

Injection

This module focuses on understanding and exploiting injection vulnerabilities

- Understanding Injection Attacks (SQL, Command, LDAP, etc.)
- Identifying Injection Points
- Exploiting Injection Vulnerabilities
- Mitigation Techniques
- Hands-on Labs: Injection Attack Simulations

Module 11

Cloud Computing and IOT Security

This module explores the security challenges and solutions in cloud computing and IoT environments.

- Introduction to Cloud Security
- Cloud Security Best Practices (AWS, Azure, GCP)
- IoT Security Challenges and Solutions
- Securing IoT Devices and Networks
- Hands-on Labs: Cloud Security Configurations and IoT Security Implementations

Module 12

Cryptography

This module covers the fundamentals of cryptography and its application in information security.

- Introduction to Cryptography
- Symmetric vs. Asymmetric Encryption
- Hashing and Digital Signatures
- Public Key Infrastructure (PKI)
- SSL/TLS and Secure Communications

Module 13

Cyber Laws

This module provides an overview of cyber laws and their application in the information security field.

- Introduction to Cyber Laws
- Major International Cyber Laws and Regulations (GDPR, HIPAA, etc.)
- Intellectual Property Rights in Cyber Space
- Legal Aspects of Cyber Crime
- Case Studies on Cyber Law Violations

Module 14

Generative AI in Cybersecurity

- Introduction to Generative AI
- Generative AI Models and Techniques
- GANs (Generative Adversarial Networks)
- Variational Autoencoders (VAEs)
- Transformer-based Models
- Applications of Generative AI in Cybersecurity
- Threat Detection and Analysis
- Malware Generation and Defense
- Anomaly Detection
- Generative AI for Phishing Attack Simulation
- AI-driven Security Automation
- Ethical Considerations in Generative AI for Cybersecurity



FACULTY & ACADEMIC ADVISORS*



Mr. Aneel Kumar

Cyber Security Analyst - Faculty Trainer - 3+ Years of Experience

Mr. Aneel Kumar is a certified Cyber Security Analyst with over 3 years of experience and a Certified Ethical Hacker (CEH) credential. Currently a Trainee at DataCrew, Aneel excels in penetration testing, vulnerability assessments, and network security. Passionate about cybersecurity, he is committed to mentoring students and equipping them with the skills needed to thrive in the ever-changing digital landscape.



Ms. Umaiya Khalid

Sr. Mentor Softs skills

Umaiya Khalid is performance -oriented, and dedicated to maintaining agility, responsiveness, and efficiency in any given field. Successful history in bringing in top-notch clients & and staff. Improving operational strategies and boosting team performance. An articulate and encouraging leader with a decisive nature and forward-thinking approach. Offers expertise in Soft skills, People Management Advertising, Marketing, and Events



CERTIFICATE



DATA CREW
UNBOX LEARNING EXPERIENCE

Certificate of Achievement

Yashodeep Patil

Has Successfully Secured **PG Certification in Cybersecurity with Generative AI** At Datacrew Education India Pvt. Ltd with Excellent Performance

Between 01/06/2023 to 05/01/2024

Issued Date : 30/01/2024


DATA CREW EDUCATION INDIA PRIVATE LIMITED

Supriya Jadhav
Co-Founder | CTO DIRECTOR



Voice of success



Syed Amaan Ariz

Information Security – Associate
4.00LPA - Fresher, 2024 Passout



TheMathCompany



Yashodeep Patil

Role - Cybersecurity Engineer

Tech
Mahindra



Shivam Bhaduka

Role - Cybersecurity Engineer

Tech
Mahindra



Datacrew

CAREER SUPPORT

All program participants will receive career support through Datacrew Ed-Tech



Unlimited Interviews till first Placement

We regularly host career fairs across major cities, offering our students unlimited opportunities to interview with top industry leaders. At our recent fair, esteemed hiring partners such as PwC, Tech Mahindra, Myntra, TheMathCompany, Lenovo, and V-Guard conducted over 300 interviews, ensuring that our students are on the fast track to their first placement.



Personal Career Coach

Get access to career mentoring depending upon your experience in the industry with a personal career coach. The coaches are either industry experts or have transitioned to technology teams, so candidates benefit from their guidance on how to build a career in the industry.



e-Portfolio & Resume Building Sessions

An e-portfolio is a snapshot of all the projects done and skills acquired during the program that is shareable across social media channels. We also help you build your resume to highlight your technology skill-set along with your previous professional experience.



Job Board

The program provides candidates access to the Datacrew Job Board. 50+ organizations approach us with job opportunities which are shared through the Job Board with our candidates. We've seen over 500+ alumni transition to the careers of their choice, with an average salary hike of 48%.

COMPANIES THAT HIRE FROM DATACREW ED-TECH

 TheMathCompany

**Tech
Mahindra**


pwc

 **SentinelOne®**

 **Avalon**

 **Myntra**


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[expleo]


Liasis Foras
Real Estate Rating & Research Pvt. Ltd.

NTT DATA

DATA ENTREGA


Fullerton
India


SECURITY
SOLUTIONS

KPMG


Indian Eagle

Justdial


wipro

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 **JOCKEY.**

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AND MANY MORE...

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