

with Experts

A programme by



Security + **Hands-on Practice Preparation** 

In collaboration with



## The Future is Cyber Security



Image credit: Christopher Gregory/The New York Times



There are only two types of companies: those that have been hacked, and those that will be.



Robert Mueller - FBI Director, 2012

Malicious hackers are becoming increasingly adept at exploiting software vulnerabilities, leading the world to cyber crime costing \$10.5 trillion annually by 2025 (Source: Cyber Security Ventures). This has compelled organizations to build cyber security measures or risk losing their reputation and valuable data.capabilities.



#### **GLOBAL SKILLS SHORTAGE**

**93%** of Business Leaders believe the global skills shortage is increasing every year.

- Information Systems Security Association, July 2020



#### 3.5 MILLION JOBS

in cyber security to be available by 2025, according to the U.S. Bureau of Labor Statistics.

- Cybersecurity Ventures, 2022



#### \$2.6 BILLION

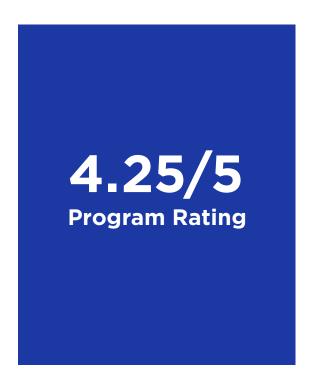
will be spent on cyber risk management by Indian users in 2022.

- Gartner

A cyber security professional is engaged in a strategic game of ever-changing defensive and offensive techniques and must know the ins-and-outs of the domain to protect IT infrastructures effectively.



The Post Graduate Programme in Cyber Security equips you with the skills needed to investigate attacks and build robust cyber security systems while giving your resume the Great Lakes Executive Learning advantage. The programme is ideal for cyber defence enthusiasts, enabling them to connect with thought leaders in the industry and understand the process of securing digital infrastructure.



#### Languages and Tools that you will learn

















webtools

 ${\tt NIST\ NVD\ Common\ Vulnerability\ Scoring\ System\ Calculator}$ 

GREAT LEARNING - INDIA'S LEADING PROFESSIONAL LEARNING COMPANY



7.1 MN+ LEARNERS 2600+
HIRING COMPANIES

5800+
INDUSTRY EXPERTS

170+ COUNTRIES



The new-age technological wave has come with its own set of threats, leading to a prominent demand for cyber security professionals. This programme is crafted by experts to empower you with a skill set to analyse the threat landscape and build long-term cyber security strategies.



A comprehensive curriculum to become industry-ready



Interactive live mentorship with industry experts



PG Certificate from Great Lakes Executive Learning



Lab sessions to gain hands-on experience



A final 4-week capstone project (optional)



Cyber range with 20+ self-paced incidents based on Bitlocker, HiddenEye, and Metasploit, etc



Prepare yourself for the CompTIA Security+ certification exam



#### Young professionals & mid to senior-level managers

Learn the core concepts of cyber security and build a solid foundation using the in-demand market skills. You will benefit from this if you are:

- A fresh graduate wanting to break into the cyber security domain.
- A professional looking to transition into a career in cyber security.
- An IT infrastructure manager wanting to upskill with cyber security.
- A mid to senior-level manager involved in cyber security governance and decision-making.

## Successful completion of the programme may qualify you for various roles in cyber security, including:

- Cyber Security Analyst
- Cyber Threat Intelligence Analyst
- Information Security Specialist
- SOC Specialist

- SOC Analyst



#### Upon completion of the programme, you would have developed the skill set needed to:



**1.** Develop the Security Mindset



**5.** Comprehend the evolving threat landscape by understanding the biggest cyber attacks to-date



2. Perform incident investigations to identify the source of the threat, assess the risk and respond, and write clear and world-class incident reports



**6.** Build muscle memory for responding to cyber attacks by following Incident Response playbooks



**3.** Familiarise yourself with the Standards and Frameworks such as: National Institute of Standards and Technology (NIST), MITRE ATT&CK, Center for Internet Security (CIS) Benchmarks



7. Prepare for the Comptia's Security+, CompTIA
Cybersecurity Analyst
(CySA+), and EC-Council
Certified SOC Analyst (CSA)
certifications



**4.** Demonstrate the understanding of how to identify and defend against modern-day threats such as Ransomware

## Curriculum

The programme is designed with 5 milestones. Starting strong with the foundations of cyber security, you then deep dive into the different types of cyber attacks. As you understand the attacks, you will learn to design the security controls needed to build a resilient system. Finally, if an attack happens, you practise responding to these incidents by referring to Incident Response Playbooks given to you as part of the programme. In this last section, you will also learn how to investigate these attacks.

## MODULE 1: FOUNDATIONS OF INFORMATION SECURITY | 4 WEEKS

Learn the fundamentals of Risk Management, Cryptography, Network Security, and Cloud Security

## MODULE 2: UNDERSTANDING CYBER ATTACKS | 4 WEEKS

Learn about the latest advances in cyber security and how such attacks are managed at organisational levels

## MODULE 3: DESIGNING SECURITY CONTROLS | 4 WEEKS

Learn how to identify and implement the right cyber security control for various cyber attacks

## MODULE 4: SECURITY OPERATIONS & INCIDENT MANAGEMENT | 4 WEEKS

Learn to use Incident Response Playbook to defend against an ongoing cyber attack, and protect critical digital resources in this situation

## MODULE 5: PREPARE FOR SECURITY+ (OPTIONAL) | 4 WEEKS

Prepare yourself for the CompTIA Security+ certification exam with coverage of key concepts measured and recap of essential modules from the curriculum

## MODULE 6: CAPSTONE PROJECT (OPTIONAL) | 4 WEEKS

Demonstrate your learnings throughout the programme with a comprehensive capstone project

#### PRE-WORK (OPTIONAL)

For professionals seeking a full-time career in Cyber Security, but working in a non-IT domain, we have a special course to learn the fundamentals required to build Cyber Security solutions. With a strong foundation, your learning journey in Cyber Security will be more streamlined.

#### **TOPICS**

- O CIA Triad
- ⊘ Need for SecurityIAAA Identity Authentication
- Authorisation Auditing
- Cryptography
- **Overall** Enterprise Applications
- Network Security

- OSI and TCP/IP Model
- Wireshark
- Zero Trust
- Securing the Cloud
- Security Compliance & Frameworks
- Application Security (Nessus, Metasploit)

#### **KEY TAKEAWAYS**

- Understand the 'why' behind cyber security
- Learn the principles of Risk Management
- Gain an understanding of how enterprise applications work
- Understand the concepts behind network design & network security
- Understand how cryptography works & what it protects
- Get a flavour of perimeter-less security, also called Zero Trust Network architecture
- Demonstrate your understanding by completing labs that simulate real-life scenarios

#### MODULE 2: UNDERSTANDING CYBER ATTACKS

#### **3 PROJECTS**

#### **TOPICS**

- Threat Tactics
- Malware
- Attack Kill Chain
- Attack Vectors
- Deep Dive Into the Dark Web
- Physical Attacks

- Indicators of Compromise
- © Case Study: Not Petya Solarwinds, Colonial Pipeline, Olympic games
- Attack Groups Unit 8200, Nobelium, APT 29

#### **KEY TAKEAWAYS**

- Understand the different types of cyber attacks and the risks they pose
- Familiarise yourself with the types of threats and threat actors
- Delve deeper into the Tactics, Techniques and Procedures used by the adversaries with insights
- Understand the structure of an attack- Kill chain methodology
- Apply the concepts of cyber attacks and threat to discern the Solarwinds and Colonial Pipeline attacks

#### **MODULE 3: DESIGNING SECURITY CONTROLS**

Firewalls

**TOPICS** 

- Web Application Firewalls
- Antivirus & EDR
- Email Protection
- O Data Loss Prevention
- ∀ulnerability Management

- Patching
- System Audit

2 PROJECTS

- Maintenance, Monitoring, and Analysis of Audit Logs
- SIEM (Security Information and Event Management)
- Incident Investigation
- Threat Intelligence

#### **KEY TAKEAWAYS**

- Understand the controls that help in detecting security threats
- Develop a deeper understanding of SIEM and its purpose
- Familiarise yourself with the reviewing, interpreting, and understanding of computer-generated logs
- Learn how cyber threat intelligence helps in assessing security threats
- Gain knowledge on network firewalls and web application firewalls
- Familiarize yourself with antivirus and its applications
- Understand and practise shell scripting

#### **MODULE 4: SECURITY OPERATIONS & INCIDENT MANAGEMENT**

**2 PROJECTS** 

#### **TOPICS**

- NIST Framework
- The Golden Hour
- Writing Incident Reports
- Security Operations Centre –A Deep dive

- SLAs KRIs, KPI
- Maintenance, Monitoring, and Analysis of Audit Logs
- Recovery from an Incident
- Forensics

#### **KEY TAKEAWAYS**

- Learn how to read, write and examine incident reports
- Learn about the Incident Response Lifecycle of NIST
- Familiarise yourself with the concept of the golden hour
- Understand how to examine incident data in order secure from cyber threats using forensics
- Gain knowledge on the tasks performed at a Security Operations Center (SOC)
- Learn to form a recovery strategy from a cyber attack

#### MODULE 5: PREPARE FOR SECURITY+ (OPTIONAL)

Prepare yourself for the CompTIA Security+ certification exam.

#### **TOPICS**

- Threat Actors, Vectors and Intelligence Sources
- Attack Indicators
- ∀ulnerability Assessments
- Implementing Security Concepts in an Enterprise Environment
- Authentication and AuthorizationDesign Concepts
- Implementing Secure Protocols,
   Secure Network Designs and
   Application Security Solutions
- Regulations, Standards and Frameworks for Organisational Security Posture
- Data Privacy Concepts

#### **KEY TAKEAWAYS**

- Prepare for the Security+ exam by learning about the key concepts
- Get complete coverage of the domains measured in the Security+ examination:
  - Attacks, Threats and Vulnerabilities
  - Architecture and Design
  - Implementation
  - Operations and Incident Response
  - Governance, Risk and Compliance
- Recap the concepts learned in the mandatory modules with a specific focus on the Security+ certification exam
- Utilise the question bank to practice essential concepts

#### MODULE 6: CAPSTONE PROJECT (OPTIONAL)

Choice of the Capstone Project is tailored for practitioners and decision makers.

#### **KEY TAKEAWAYS**

- The Capstone Project challenges you to demonstrate your skill & knowledge
- You will use a combination of hands-on skills and security research capability





All certificate images are for illustrative purposes only. The actual certificate may be subject to change at the discretion of the university.



#### **FACULTY**



**Aniket Amdekar**General Manager - Cyber Defence Education



Aniket is the lead faculty for PGP in Cyber Security and has over 15 years of experience in the field. He has worked with companies like Symantec, Microsoft, MakeMyTrip, and Walmart. He holds multiple certifications like CISSP and CISM.



**Vikas Singh Yadav** Chief Information Security Officer

Vikas Yadav is an experienced Information Security professional and has held multiple leadership roles. He has done his M.Tech (Computer Science) from IIT Kharagpur and also holds CISSP certification. His core interests lie in Cloud Security and securing digitally native startups. He is a military veteran and has served in the Indian Army with Information Security and Warfare roles. He actively mentors students for Cyber Security roles.



**Abdul Mateen** Information Security Analyst



Abdul works as a Security Analyst where his role requires him to define security measures, policies, governance standards, checklists, and controls based on industry best practices. He monitors network traffic as an intrusion prevention specialist to detect possible threats and respond to threats immediately as they occur.

#### **MENTORS**



Farhad Sajid Barbhuiya Tech Lead (Security)



Farhad is a highly skilled Cyber Security personnel (Application Security:-iOS, Android & web, Cloud Security:- AWS, Reverse Engineering). He is also a passionate Data Science practitioner and has received IBM Advanced Data Science Specialist badge. Being an practitioner in Infra, Web, iOS and Android application, Thick Client testing, his motive is to spread cyber security awareness in the world of vulnerable cyber space. He helps organisations for their Cloud Infrastructure, Web Application, Mobile Application(iOS & Android), Thick Client security and Threat Intelligence. His service has helped clients who struggle with managing a secure application for their target audiences with sharp, meaningful and relevant deliverables.



**Prashant Gupta** Technical Lead



Prashant is a detail-oriented Information Security Analyst and Java Developer motivated to drive projects from start to finish as part of a dynamic team. He has superior capacity to solve complex problems and thrive under pressure in fast-paced environments. He is focused on satisfying customer needs through robust, innovative and forward-thinking solutions.



**Ravindra Joshi** Partner Build Consultant



Ravindra is an experienced PreSales expert within the Solutions Engineering team. As a Partner Solutions Engineer, his work involves working closely with the partners to educate, empower, and ensure their success delivering integrated security, reliability and performance.



**Dhirendra Rajput** Cyber Security Manager

Dhirendra is leading the Cyber Security & IT Infrastructure for a major company. His roles and responsibilities include: - OT Cyber Security, IT Security & Compliance, IT Infrastructure Management, Cloud Administration, PCI DSS Compliance, GDPR Implementation & Training, SOC2 implementation & Internal Auditor, IT Security implementation & Audit.

## Alumni Speak



"Great Learning's program is amazing, even for beginners. The mentorship and help provided is helpful. This program helped me in an interview with the Head of Threat Research at my new company, thanks to the precise guidance provided by the faculty."

**Subham Saral** Assistant Manager **Deloitte.** 



"After completing my B.Sc in 2021, I began my career as a Cyber Security Associate. Initially, I felt unsure and lacked confidence in myself. However, when I discovered Great Learning's PGP in Cyber Security by Great Lakes, I felt relieved. The program provided excellent materials and the best faculty, which instilled confidence in me. I learned so much, and now I am confident about myself and my career."

Manoj Kumar Siripurapu Java Developer





"I am working in a senior position as a National Cyber Security Regulator in RBI and have inspected more than 100 financial intermediaries by regularly monitoring their cyber security. The program lectures and program content have given me an opportunity to view the national Cyber Security threat from a different perspective. My takeaways will definitely get reflected in policy making towards bringing up the cyber defense for our country. I will definitely recommend my team across India to take this program."

**Deepan Dey** Ex. Deputy General





"In 2008, my professional career began as a Process Executive. Although my interest was in Cyber Security, being from a non-technical background made me reluctant to pursue further studies. However, I found my way with Great Learning's program in Cyber Security. The program's pre-engagement module, online videos, weekend lectures, recorded sessions, and lab sessions helped me gain insights into the Cyber Security world. Thanks to the program, I updated my resume and received multiple job offers, ultimately choosing a bank to further grow. Great Learning is the best platform for Cyber Security due to its direct teaching approach for career success."

Vaidehi Gonjari Senior Manager - IT Auditor





"The Cyber Security program from Great Learning is highly recommended for beginners as well as professionals looking to transform their career. The faculty is highly educated, online lectures are excellent, and projects are real-life case studies. The mentors and program managers provide hand-holding sessions and help students complete the program from scratch. The program is well-structured and designed to balance careers with learning, and the team of coaches and counselors is amazing."

H. Subramonia lyer Manager



## Admission Process

#### **Programme Eligibility**

Applicants should have 2+ years of work experience in the IT domain.

OR -

Applicants from Non-IT backgrounds as well as any graduate with a high level of familiarity with IT systems, who can demonstrate a keen interest in cyber security with basic technical skills.

The admissions are conducted on a rolling basis and the admission process is closed once the requisite number of candidates has been enrolled into the program.

#### **Selection Process**



#### APPL

Apply by filling a simple application form.



#### **SCREENING PROCESS**

Go through a screening call with the Admission Director's office.



#### **JOIN THE PROGRAMME**

An offer letter will be rolled out to the select few candidates. Secure your seat by paying the admission fee.

#### **Programme Fee**

### **INR 1,25,000 + GST**

Please get in touch with a Programme Advisor for details on installment options.

#### **Payment Plan**

Start learning at ₹2,851 per month









# Programme Partners



Great Lakes is India's leading business school with campuses in Chennai and Gurgaon. Led by exceptional faculty and steered by an outstanding advisory council, Great Lakes is ranked amongst India's top 10 business schools and is ranked as the best in the country when it comes to learning analytics. A certification from Great Lakes ensures you get the industry credibility and acceptance as you look to build your career.



Great Learning is a leading global ed-tech company for professional and higher education. It offers comprehensive, industry-relevant programs across various cutting-edge Technology, Data, and Business domains. These programs are developed in collaboration with the world's foremost academic institutions such as Stanford Executive Education, MIT Professional Education, Wharton Online, The University of Texas at Austin, Northwestern School of Professional Studies, National University of Singapore, Deakin University, IIT Madras, IIT Roorkee, IIIT-Delhi, Great Lakes Institute of Management, and more. They are constantly reimagined and revamped to address the dynamic needs of the industry. Offered in blended, classroom and purely online modes, these programs are delivered with the help of expert mentors and highly qualified faculty. Great Learning is on a mission to enable transformative learning and career success in the digital economy and has impacted 7.4 million+ learners from over 170 countries.

## Ready to become a cyber security expert?

**APPLY NOW** 

Speak to a Program Advisor:

+91 803 730 9129

— OR —

Email Us:

cybersecurity@mygreatlearning.com

Visit Our Website:

www.mygreatlearning.com