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WHIZHACK
Securing Digital

Presents

# Advanced Certificate Bootcamp In
# Cyber Defense

IITJ TISC

## IITJ Technology Innovation & Start-up Centre (TISC)

## INDIAN INSTITUTE OF TECHNOLOGY JODHPUR

India's 1st Dual Certificate Program

Powered by

ThriveDX

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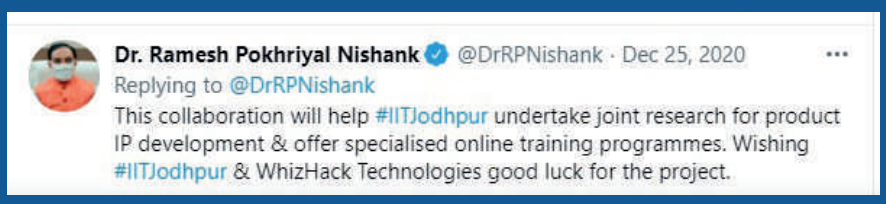
India today not only faces unprecedented opportunity of widespread digital adoption but also threat of sophisticated global cyber attacks.

IITs have been at the forefront of nation building through innovation and technology development. Five of the seven Indian companies that have recently entered the unicorn club—startups valued over $1 billion—were founded by entrepreneurs who were trained at an IIT.

IIT Jodhpur has specialised in joint initiatives with industry to meet modern technology needs of India. WhizHack Technology is incubating a Centre of Excellence in Cybersecurity at IIT Jodhpur with focus on developing technologies and training solutions to empower Indians to tackle next generation of Indian and global cyber challenges.

The Advanced Certificate Bootcamp Program in Cyber Defense blends the best of Indian academicians, top industry experts, Israeli pedagogy and best virtual labs to provide a unique learning experience and dual certification to learners. Cyber security being a global issue, excelling in skillsets automatically would allow learners to access the best of Global and Indian careers.



## Dual Certification from the Best of India and the Globe

# Cyber Defense Bootcamp

### *Get the Skills. Land the Job.*

The explosion of high tech cyber attacks has led to industry and government to shift focus to "Proactive Cyber Defence". This means acting in anticipation to oppose an attack involving computers and network. This skillset has maximum potential demand from employers, in current and future.

The Cyber Defense Bootcamp at WhizHack covers the hands-on and practical skills necessary for Bootcampers to land high-paying careers in cybersecurity, one of the world's fastest growing industries.

The Cyber Defense Bootcamp is an accelerated cybersecurity training program designed to successfully prepare people with little or no background in IT for entry level jobs in cybersecurity, a highly in-demand and lucrative career path. The Bootcamp is delivered completely online with both live video classroom sessions and online self-paced activities.

**97% Employment rate**

**Career-ready skills**

**Affordable & accelerated**

## *Why Cyber Security and Cyber Defence?*

Cybersecurity is the fastest growing market in technology with 30x growth over the last decade.

Not only is it a hot career path, but the field has had 0% unemployment for nearly a decade. With plentiful opportunities and competitive compensation, the only thing standing in your way of a lucrative, future-proof global career is skill and certification.

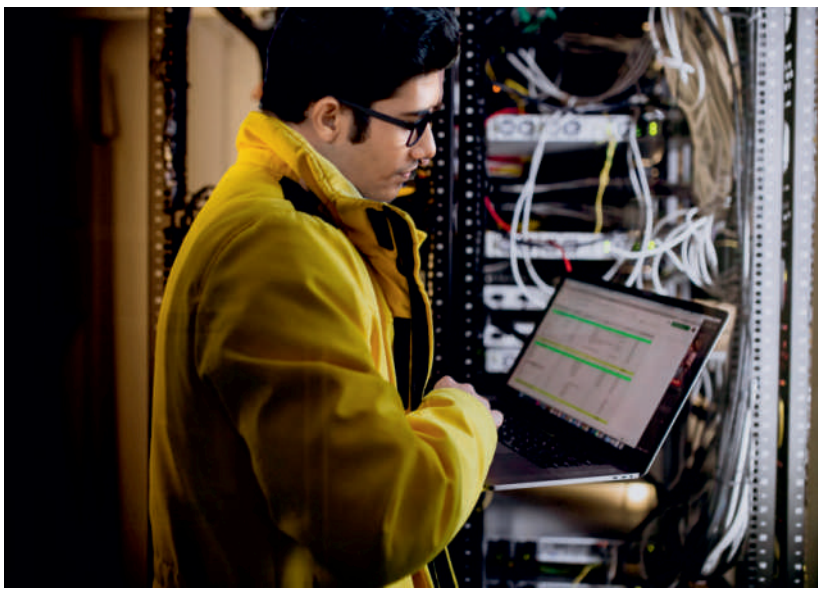
**0% Unemployment rate since 2011**

**INR 500,000 / $80,000 Average entry level salary**

**350% Cyber job growth through 2021**

## *Who it's For:*

The Cyber Defense Remote Bootcamp is for anyone interested in becoming a Global Cyber Defense Expert. The training will ensure learners get the best blend of skill sets to tackle global cyber threats and also certification that's valued in India and beyond.



## *Qualifications:*

Selections to the Program will be on the basis of following

- Aptitude for Cyber Security
- Academic Background
- Statement of Purpose

Graduates from any discipline can apply

## *How it Works:*

The dual certification program was developed around Israeli military training methodology and live mentoring by top faculties. 50% of pedagogy comprises of hands on learning on live projects and simulated scenarios.

The Cyber Defense Remote Bootcamp was developed around military training methodologies and hands-on learning. We know that everyone learns differently which is why WhizHack offers Bootcampers with two accelerated tracks:

- ***Full time,*** 3 months: Fully online activities and live virtual classes every day with the Bootcamp Facilitator, with built-in one-on-one time.
- ***Part time,*** 6 months: This will cover the same content, over a longer period of time and with live virtual classes occurring only twice a week, 2 hours each day.

### *During Bootcamp*

- Self-paced and flexible learning with instant feedback
- Curriculum based on National Initiative for Cybersecurity Education (NICE)
- Access to faculties and industry experts
- Guidance on job searching and resume building

### *Upon Graduation*

- 12 months of continued access to online learning platform
- Connection to our alumni and career network
- ***A new career in: Cyber Forensics Analyst, Network Operations Specialist, Cyber Analyst, Cyber Incident Responder, Cyber Infrastructure Support Specialist***

**480 Hours of quality content**

**Learn from anywhere**

**Real-world simulations**

## MODULE 1

- Introduction to the Bootcamp
- Overview of the Cybersecurity Landscape and Industry
- Basics of Computer and Device Hardware, Software, Operating Systems and Processes
- Basics of Networking Traffic, Hardware Components and Topology
- Network Communication Principles and Methods

## MODULE 2

- Network and Routing Protocols / Services
- Packet Level Traffic Analysis
- Hands-on Operation of a Computer Network and Equipment, Monitoring and Analyzing Network Traffic Flow, Patterns and Performance
- Hands-on Creation and Analysis of Critical Network Servers.

## MODULE 3

- Hands-on Creation and Analysis of Telnet, Web, Data and Active Directory Servers
- Hands-on Analysis of Network Topologies, Network Mapping and OS Fingerprinting
- Telecommunication Concepts and Range
- System and Network Admin Concepts, Management Principles and Controls
- Hands-on Creation and Use of Virtual Machines and Bootable USB OS

## MODULE 4

- Overview of Threats, Classes, Attackers, Tactics, and Application Security Risks (OWASP)
- Hands-on Communications Security through Encrypting and Decrypting Data and Medias
- Hands-on Backup and Recovery of Data, Devices and Servers
- Network Security Principles, Methods, Protocols, Components and Architectures

## MODULE 5

- Hands-on Assessment of Access Controls and Hardening Techniques to Ensure a Network's Security
- Hands-on Configuration and Utilization of a Firewall (on Windows, Linux and Hardware Firewall)
- Hands-on Configuration and Utilization of a Network/Host Intrusion Detection/ Prevention System to Alert and Prevent Malicious Activity on a Network

## MODULE 6

- Hands-on Configuration and Utilization of a Security Information and Event Management System to Correlate, Research, Analyze Logs and Provide Timely Detection of Misuse, Threats and Malicious Activity on the Network
- Hands-on Malware Detection, Analysis, Isolation and Removal

## MODULE 7

- Cyber-Forensic Investigation Methodologies, Mindset, Tools
- Hands-on Forensics Investigation: Logs, System Files, Media, Memory Dump and Traffic Monitoring and Analysis

## MODULE 8

- Overview of Network Vulnerabilities, Associated Attacks; Ethical Hacking Methodologies, Stages, Principles, Tools and Techniques
- Hands-on Conducting of Vulnerability and Compliance Scanning; and Correction Recommendation
- Hands-on Performing Incident Response, Damage Assessment, Incident Triage, Tracking and Reporting

## MODULE 9

- Full Day Scenarios: Hands-on Protecting a Network from a Range of Cyber-Attacks (DDoS, SQL Injection, XSS, Ransomware, MiTM, ARP Poisoning, etc.)

## MODULE 10

- Analysis of System Security and Organizational Posture Trends
- Analysis of Cyber-Defense Trends and Staying at the Cutting Edge of the Industry
- Performing of Security Design and Architecture Evaluation and Ensuing Recommendation

## MODULE 11

- Hands-on Process of the Whole Chain of Custody for Handling Digital Evidence
- Hands-on Performing of Static and Dynamic Analysis of Drive Images and other Data Sources, Recovery and Mitigation/Remediation of an Enterprise System

## MODULE 12

- Risk and Security Management Processes and Security Models
- Cybersecurity and Privacy Principles
- Advising on Disaster Recovery, Contingency and Continuity
- Summary and Presentation by Bootcampers
- Technical and Soft-Skill Preparation of a Job Interview
- Final Hands-on Scenario

## About ThriveDx

ThriveDX, the world's premier EdTech provider, champions digital transformation training as a means of empowering individuals to thrive in the age of digital disruption.

## Faculty & Mentors

**Dr. Somitra Sanadhya** : Associate Professor, IIT Jodhpur
Prof. Somitra is a leading exponent in India in Cyber Security including Cryptography, Quantum Computation and Blockchain and has worked in top projects with Indian Defence and Industry. He was previously Head of Computer Department at IIT Ropar. He is a B.Tech from IIT Delhi and Ph.D in Cryptology from Indian Statistical Institute.

**Dr. Debasis Das**: Assistant Professor, IIT Jodhpur
Prof. Debasis specialises in Cyber Defense particularly Network Security and Forensics. He has worked on multiple national projects with DST (Department of Science and Technology) and has earlier taught in BITS Pilani. He has done a Ph.D. in Compuer Science from IIT Patna

**Roy Zur**: CEO,ThriveDX
Roy is the founder and CEO of ThriveDX, a cyber education company. As a retired Israeli Defense Forces Major, Roy has more than 15 years of experience in cybersecurity and intelligence operations and has developed cyber education programs and technological solutions for companies, educational institutions and government agencies around the world.

**Sanjay Sengupta**: CTO, WhizHack Technologies
Sanjay is a leading industry expert with more then 2 decades of experiences across Silicon Valley and India. Sanjay was the Product Architect of World's #1 Cyber Deception company, Attivo Networks and currently leads all technology initiatives with WhizHack Technology. Sanjay is a M.Tech in Computer Science

## Fee Details

Program Fee : Rs. 1,65,000+GST

EMI options available

For details, pls visit http://www.whizhack.com/tisc-iit-jodhpur-bootcamp or write to iitj@whizhack.com

Address: WhizHack Technologies Pvt. Ltd.
9th Floor, Emaar Palm Plaza, Golf Course Road, Gurgaon 122 011