



Department of Science & Technology
Government of India

EC-Council

IntelliPaat



ADVANCED CERTIFICATION PROGRAM IN

CYBER SECURITY AND ETHICAL HACKING

Take your career to the next level by mastering cybersecurity and ethical hacking skills!



10 Million
Learners



1:1 Personalized
Mentorship



55% Average
Salary Hike

Advanced Certification Program in Cyber Security and Ethical Hacking

This advanced certification program in cyber security and ethical hacking is designed to provide professionals with the skills and techniques who are looking forward to kick starting their careers in the field of ethical hacking. The course is designed by iHUB DivyaSampark, IIT Roorkee, and Intellipaat, and will help you learn all the necessary skills needed to master the field.



EC-Council



Hottest Job of 21st Century



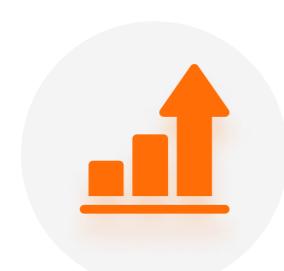
1.9 Million Job Postings

There is a global estimate of 1.9 million job postings for Cybersecurity and Ethical Hacking roles by 2022



Skill Development

Cybersecurity and Ethical Hacking professionals are equipped with various relevant skills fetching lucrative job offers



Growing Cyber Security Industry

38% CAGR in Indian Cybersecurity and Ethical Hacking industry



Future-oriented Career

Cybersecurity and Ethical Hacking is a budding field; a head start will prove to be beneficial



Popular Degree

46% of Cybersecurity and Ethical Hacking professionals have a Master's Degree



High Demand

By 2022, India & US will face a demand supply gap of 450,000 Cybersecurity and Ethical Hacking professionals

Our Credentials



10 Million+

Aspiring Active Students



1,000+

Industry-expert Instructors



400+

Hiring Partners



500+

Corporates Upskilled



55%

Average Salary Hike



155+

Countries' Learners

About Program

This advanced certification program in cyber security by iHUB DivyaSampark, IIT Roorkee offers 8 modules and a career-accelerating capstone project to elevate your professional journey. This course will help you gain expertise in Networks, SQL, Application Security, Risk Analysis, and Mitigation via live classes by IIT professors.



Learning Format

Online Bootcamp



7 Months

Live Classes



Campus Immersion

IIT Roorkee



IITR iHUB

Certification

Key Highlights

- ✓ 168 Hrs of live classes
- ✓ Learn from IIT Faculty & Industry Experts
- ✓ One-on-One with Industry Mentors
- ✓ 24*7 Support
- ✓ 1:1 Mock Interview
- ✓ Placement Assistance
- ✓ Free Career Counselling
- ✓ 2 Days Campus Immersion at IIT Roorkee
- ✓ 60+ Live sessions across 7 months
- ✓ 25+ Industry Projects & Case Studies
- ✓ Weekend batches available
- ✓ Dedicated Learning Management Team
- ✓ Designed for working Professionals & Fresher's
- ✓ Resume Preparation and LinkedIn Profile Review
- ✓ iHUB DivyaSampark, IIT Roorkee Certification

Program Pedagogy



Instructor-led Training

Get trained by top industry experts



Hackathons

Get a sense of how real projects are built



Dedicated Learning Management Team

To help you with your learning needs



Peer Networking and Group Learning

Improve your professional network and learn from peers



Self-paced videos

Learn at your own pace with world-class content



Gamified Learning

Get involved in group activities to solve real-world problems



Projects and Exercises

Get real-world experience through projects



1:1 Personalized Learning

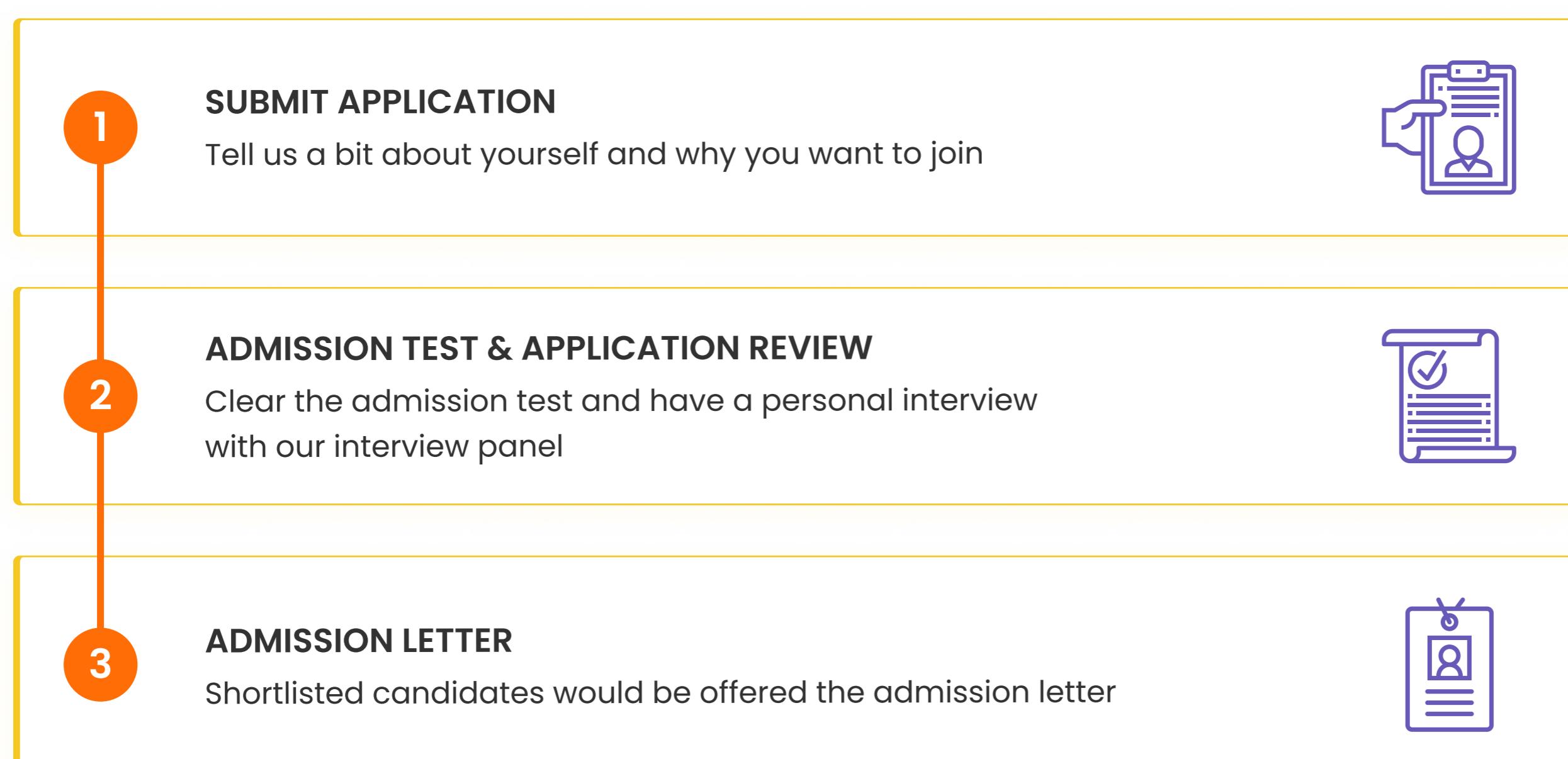
Hands-on exercises, project work, quizzes, and capstone projects

Who Can **Apply for the Course?**

- ✓ Anyone who has a bachelor's degree
- ✓ Anyone who is in the final year of their bachelor's degree program
- ✓ IT professionals
- ✓ Anyone who wants to pursue ethical hacking

Application **Process**

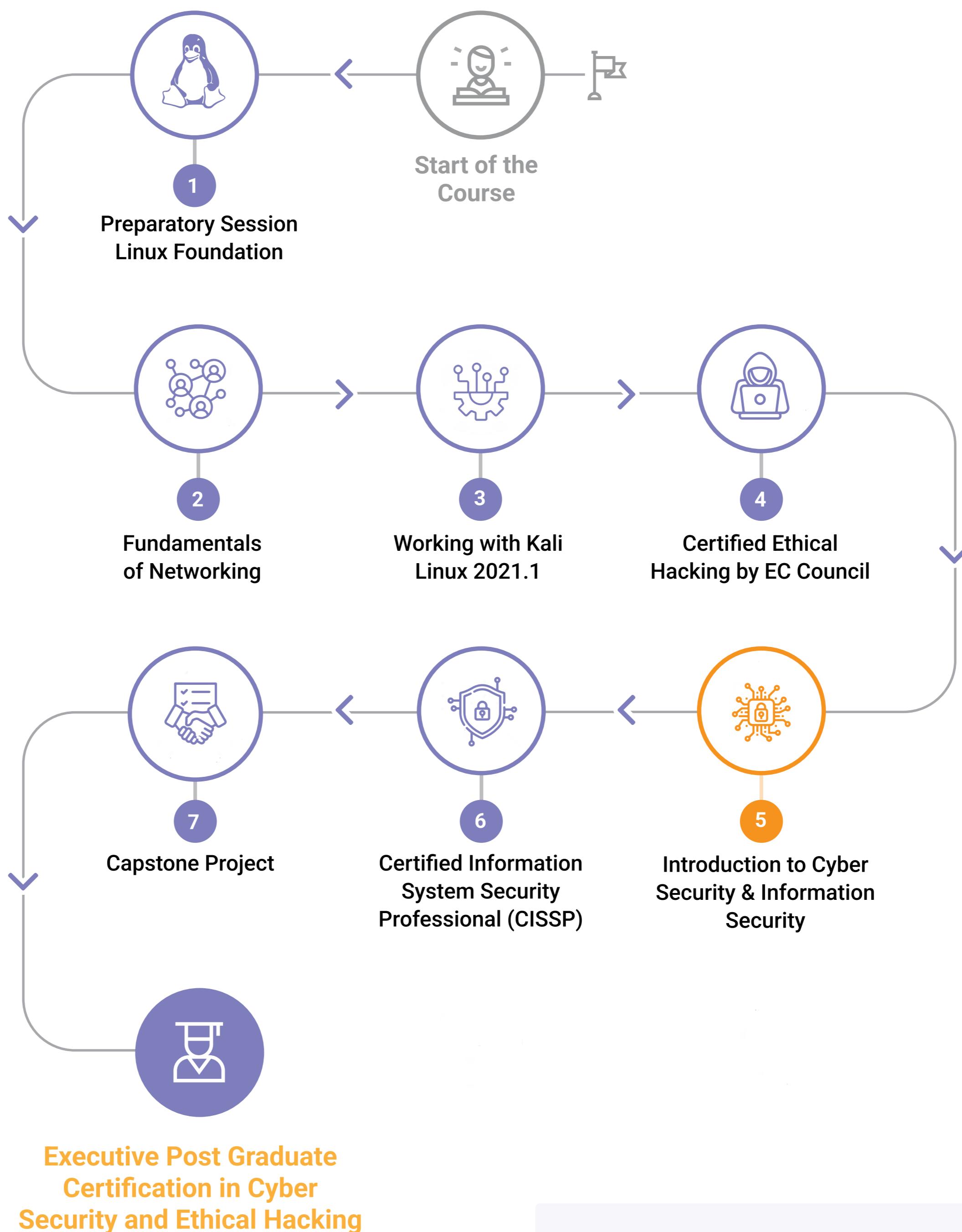
The application process consists of three simple steps. Candidates have to submit their application. An offer of admission will be made to the selected candidates, and their application will be accepted upon the payment of the admission fee.



Learning Path

Live Courses

- Live Courses
- Self-paced
- Industry Expert
- Academy Faculty



Self-paced Course

- Python

Program Curriculum

Module 1

Preparatory Sessions Linux Foundation

Linux

- Introduction to Linux
- Linux Basics
- Hands-on Sessions And Assignments for Practice

Module 2

Fundamentals of Networking

Module 3

Working with Kali Linux 2021.1

- Introduction to Kali Linux
- Services in Kali (HTTP, SSH)
- Wget, curl, grep, awk, tail, head, watch, find, locate
- Piping and Redirection
- Python and Bash Scripting
- Netcat, Socat, Powertac, Powershell, Wireshark, tcpdump
- Note taking

Module 4

Certified Ethical Hacking by EC Council

- Introduction to Ethical Hacking
- Footprinting and Reconnaissance
- Network Scanning
- Basics of Enumeration
- Vulnerability Analysis
- Basics of System Hacking
- Malware Threats
- Sniffing Fundamentals
- Understanding Social Engineering
- DoS and DDoS Attacks
- Session Hijacking
- Evading IDS, Firewalls, and Honeypots
- Hacking Web Servers
- Understanding Web Application Hacking
- Fundamentals of SQL Injection
- Wireless Network Exploitation
- Mobile Platform Exploitation
- IoT Exploitation Fundamentals
- Basics of Cloud Computing
- Cryptography Essentials

Module 5

Introduction to Cyber Security & Information Security

- What is Cyber Security
- Overview
- Need and Importance
- Different verticals

Module 6

Certified Information System Security Professional (CISSP)

- Domain One – Security and Risk Management
- Domain Two – Asset Security
- Domain Three – Security Architecture and Engineering
- Domain Four – Communication and Network Security
- Domain Five – Identity and Access Management (IAM)
- Domain Six – Security Assessment and Testing
- Domain Seven – Security Operations
- Domain Eight – Software Development Security

Module 7

Capstone Project

In this module, you will learn how to prevent a web application from being hacked as well as what key points to be considered for making an web application secure. This capstone project will give you exposure to both blue team and red team work profile and help you gain exposure on both sides.

Electives

Module 8

Python

- Introduction to Python and IDEs
- Python Basics
- Object Oriented Programming
- Hands-on Sessions And Assignments for Practice

Skills to Master

- | | |
|-------------------|--------------------------------|
| • Ethical Hacking | • Networks |
| • Cryptography | • Application Security |
| • Cybersecurity | • Risk Analysis and Mitigation |

Course Projects

Projects cover the following industries:



Retail



Social Media



Supply Chain



Entrepreneurship



E-commerce



Banking



Healthcare



Insurance

Removing and Retrieving Files

Beginner

This project allows you to retrieve your deleted files and know the location of deleted files existing in the system or database. As part of this project you will also create a report of all the available Data Recovery tools.

SQL Injection

Beginner

In this SQL Injection cybersecurity attack, you will be making a report on the SQL vulnerability and submit it. This can be an interesting project for candidates having good knowledge of Python.

Password Strength

Beginner

This project equips learners with the right skills and knowledge to make a password analyzer software. Going one step ahead, you can also suggest a strong password to a user, that is not prone to attacks.

Packet Sniffing

Intermediate

In the project, you will be analyzing network traffic to keep surveillance on all the outgoing and incoming data packets. You will build a network analyzer and submit a report.

Hacking an Offline Device

Intermediate

While performing this project, you will need to collect information on the number of ways that an intruder can illegally access an offline device. You will submit a report containing methods to secure devices such as mobile phones, laptops, etc.

Credit Card Fraud Detection

Intermediate

In this project, you will be working on a system that analyzes users' transactions and their behaviors. Based on this research, your system will ascertain parameters for any unusual behavior in the system like false passwords.

Preventing Phishing Attacks on Voting Systems using Visual Cryptography

Advance

This project allows you to use visual cryptography and learn how to integrate fingerprint techniques in the voting system to uniquely identify every user.

Bypass Client-side Controls and Attack Authentication

Advance

In this project, you will learn to bypass some of the client-side controls placed in web applications to limit user inputs. You will also learn to disrupt authentication functions in the attacking authentication sessions.

Intrusion Detection System with Self-programming Functionality

Advance

In this project, you will learn to detect any intrusion on the system and also create a fake program to create a fake system. You will create fake countermeasures to prevent and secure the original application and track the attack pattern.

Course Advisors / Faculty



Manish Anand

CEO at iHUB IIT Roorkee

Manish Anand is an IIT Kanpur alumnus with an MBA in Technology and innovation management from Korea Advanced Institute of Science and Technology (KAIST), Seoul. He currently heads iHUB DivyaSampark, a Technology Innovation Hub hosted at IIT Roorkee.



Dr. Sudeb Das Gupta

Professor at IIT Roorkee

Dr. Sudeb Dasgupta is currently working as Professor at IIT Roorkee. He has completed his PhD from Banaras Hindu University in Electronics Engineering and has more than 20 years of teaching experience.



Dr. Balasubramanian R

Professor at IIT Roorkee

Dr. Balasubramanian R, is currently working as Professor at IIT Roorkee. He has completed his PhD from IIT Madras in Mathematics and Computer Science and has more than 20 years of teaching experience. His areas of interest include computer vision, machine learning, pattern recognition, deep learning, etc.



Dr. Sushanta Karmakar

Associate Professor at IIT Guwahati

Dr. Sushanta Karmakar is currently working as Associate Professor, at IIT Guwahati. He has completed his PhD from IIT Kharagpur from the Computer Science and Engineering department and has over 15 years of teaching experience.



Mr. Rupesh Nasre

Associate Professor at IIT Madras

Mr Rupesh Nasre is currently working as an associate professor in the CSE Department at IIT Madras. He holds a PhD from IISc Bangalore, and Post-Doctoral Fellowship from the University of Texas at Austin.



Dhruva Raj Pudel

Associate Director Cyber Security at KPMG India

Certified in CISSP and CCSP by (ISC)², and Cyber security Risk management by Harvard University, he carries 14+ yrs of experience with a focus on SIEM solutions & Host Based instruction detection systems,etc., and has worked with top MNCs like Wipro and IBM.



Gaurav Ranade

Chief Technology Officer at RAH Infotech Pvt Ltd

Mr. Ranade is the CTO at RAH Infotech Pvt Ltd. He has over 25 years of experience in Techno Commercial, Solution Designing & managing Big Accounts for Cyber Security. His successful profile demonstrates self-motivation, entrepreneurial drive, and creativity.

Course Advisors / Faculty



Illyas Kooliyankal

Member of BCI (MBCI)

Mr. Kooliyankal is a Member of BCI (MBCI). He is the executor of many successful Information & Cyber Security Transformation Programs for banks and other institutions. He has 20+ years of core experience in Information Security and 25+ years altogether.



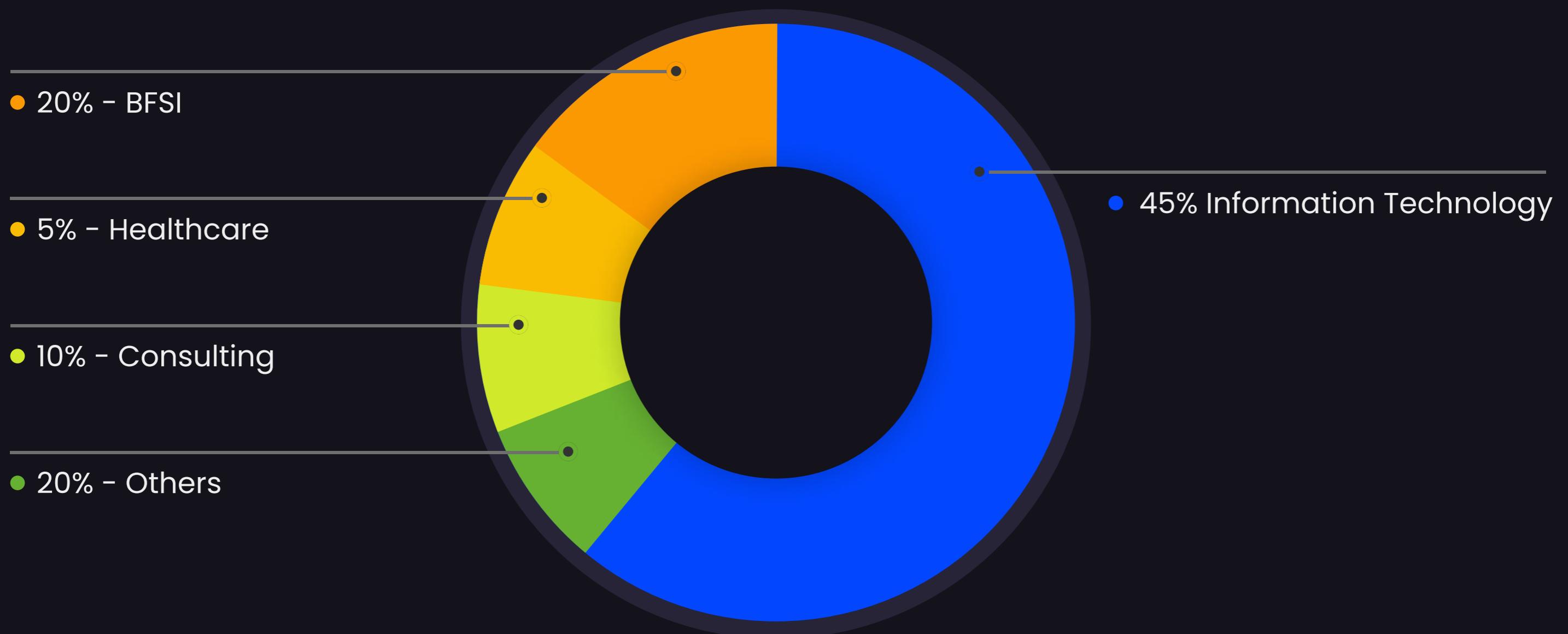
Yogendra Deoskar

Associate Director - Cyber Security at Accenture

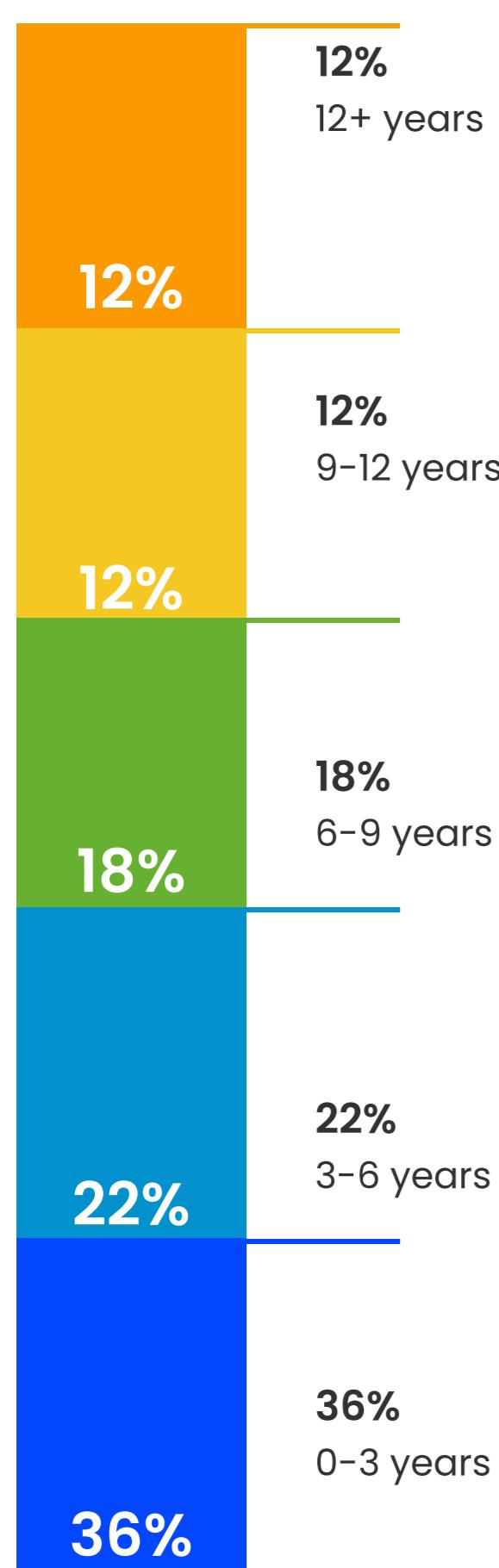
Mr. Deoskar, who has 23 years of experience in the field of Cyber Security, is currently working at Accenture as the Associate Director of Cyber Security. He is skilled in solutions architecture and has served eminent companies like Infosys and Ernst & Young.

Meet the **Batch**

Industries Our Learners Come From



Work **Experience**



Some of their current employers include

amazon

citi

Capgemini

BOSCH

pwc

EY

accenture

Adobe

TATA
TATA CONSULTANCY SERVICES

vmware®

Abbott

DELL

Intellipaat Career Services



500+
Webinars



600+
Job Shares



400+
Hiring Partners



55%
Avg. Salary Hike*

What Makes Us **Tick**



Career-oriented Sessions

Attend 10+ career-oriented sessions by industry mentors and prepare your career trajectory



Profile Building

Craft a resume highlighting Cyber Security and a LinkedIn profile to make an impression on top employers



Mock Interview Preparation

Prepare yourself with mock interviews including the most asked questions by top employers



1:1 Mentoring Sessions

Get 1:1 guidance at every step in your career transition to Cyber Security



Placement Assistance

Placement opportunities are provided once the learner is moved to the placement pool upon clearing Placement Readiness Test (PRT)**



Dedicated Job Portal Access

Get exclusive access to 200 job postings per month on Intellipaat's job portal



Job Fairs

Job fairs are conducted regularly to introduce learners to major organizations



Hackathons

Work in teams and get exclusive access to hackathons

Learner **Reviews**



Shivaraj Thevendran

System Engineer at Tata Consultancy Services

Intellipaat has some of the most experienced mentors. I am absolutely satisfied and glad that I learned new technologies through real life scenarios that also assisted me in cracking interviews.



Koundinya Sanagala

CTF player at TryHackMe

I'm very happy to have been a part of Intellipaat. The material and lectures provided by them are amazing. I'm pretty confident in what I have learned. A big thanks to the entire Intellipaat team.



Syed Zakiruddin

IT Manager at Grand Regal Hotel - Doha

The training went smoothly from day one. The learning content, trainers, hands-on assignments and quizzes all were perfect. The facility of getting recorded lessons is excellent for revising. They also have a prompt support team.

Program Partners



About Intellipaat

Intellipaat is one of the leading online training providers with more than 10 million learners in over 155 countries. We are on a mission to democratize education as we believe that everyone has the right to quality education.

We create courses in collaboration with top universities and MNCs for employability like EICT IIT Roorkee, EICT IIT Guwahati, IITM Pravartak, IIM Ranchi, IIT Jammu, IU, LSBU, University of Essex, University of Liverpool, IBM, Microsoft, etc.

Our courses are delivered by SMEs & our pedagogy enables quick learning of difficult topics. 24/7 technical support & career services help learners to jump-start their careers.



About iHUB DivyaSampark, IIT Roorkee

iHUB DivyaSampark aims to enable an innovative ecosystem in new-age technologies like AI, ML, Drones, Robots, and data analytics (often called CPS technologies). It aims to do this by promoting and enhancing core competencies, capacity building, and manpower training to provide solutions for national strategic sectors and become a significant contributor to Digital India.

Upon the completion of this program, you will:

- Certification from iHUB DivyaSampark, IIT Roorkee

EC-Council

About the EC-Council

This American organization offers education, training, and services on Cyber Security. The certification by the EC-Council validates the various cybersecurity skills that the learners will be trained in through the programme.



10 Million Learners & 500+ Corporates across 155+ countries
upskilling on Intellipaat Platform



Contact Us

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