

# National Institute of Electronics and Information Technology, Calicut

CDS/CA/7.5.1/F 40/R13B

## COURSE PROSPECTUS

Name of the Group: IT Group Name of the Course: Certificate course on Cyber Security & Ethical Hacking (Offline) Course Code: CSEH 100 Starting Date: 4<sup>th</sup> September 2023 Duration: *12 Weeks (Full time)* Course Coordinator: Sini S Nair, 9447335996 No. of Seats: 20 Seats

#### **Preamble:**

The course has been carefully crafted to equip participants with a solid foundation in the field of cybersecurity, including various tools and methodologies. Its primary objective is to familiarize participants with essential aspects such as computer security, cryptography, secure protocols, security analysis, and penetration testing techniques. By enrolling in this course, participants will enhance their knowledge and skills in safeguarding information systems, as well as analyzing and monitoring potential threats and attacks.

### **Objective of the Course:**

The 12 weeks program is aimed at molding candidates with Skilled Cyber Security and Ethical Hacking knowledge to maintain the Security of Systems and Networks in today's scenario.

#### **Outcome of the Course:**

This skill-oriented course provides candidates with the information and knowledge required to protect & recover computer systems & networks from various security threats.

## **Expected Job Roles:**

- Network Administrator
- System Administrator
- Security Analyst
- Security Engineer
- Pen Tester



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## **Course Structure:**

Sl. No.	Topics	Duration (Weeks)
1	Virtualization & Networking Basics	1
2	Linux Fundamentals & Shell Scripting	1
3	Overview of Windows & its Security features	1
4	Overview of Information Security, Mobile devices & its Security features	1
5	Introduction to Ethical Hacking, Threats, Vulnerabilities, Attacks & Ethical hacking Phases	1
6	Malware Analysis	1
7	Host/Device Security, Network Security	1.5
8	Cryptography, Webserver Configuring, Securing and validating Services	1
9	Penetration Testing methodologies	1
10	Wi-Fi Security, Cloud security, Security Auditing Formalities	1
11	Project	1.5 week
	Total	12 weeks

#### **Other Contents**

I. Course Fees:

**General Candidates**: Course fee is Rs. 30,000/- + \*GST \*At present GST is 18% (CGST 9% and SGST 9%), and revision, if any by Government shall be applicable at the time of payment.

#### Module wise Course Fee - Not Applicable

**II. Registration Fee:** An amount of Rs.1000/- (including all taxes as applicable)(nonrefundable) should be paid at the time of registering for the course.

This fee shall be considered as part of course fee, if the student joins the course. If a student registers and pay for more than one course and join for any one course, all such amount will be adjusted against the course fee payable.

If the student does not join for the registered course / any of the registered courses, fee paid shall be forfeited.

However the registration fee shall be refunded on few special cases as given below

- > Course postponed and new date is not convenient for the student
- Course cancelled in advance, well before the admission date



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### **III.** Course Fee Installment Structure: Not applicable for this course

- **IV. Eligibility**: Any Graduates and 3 Year Diploma holders with Computer Science up to 10+2 level having Operating System and Networking Knowledge.
- V. Number of Seats : 20
- **VI.** Selection of candidates : Selection of candidates who have the requisite qualifying degree will be based on the percentage of marks in their qualifying degree subject to eligibility and availability of seats. Selection of candidates who have completed the course but expecting the results shall be based on the aggregate percentage of marks mentioned in their final mark list and on the availability of seats.

#### VII. Test/Interview (*if applicable*) :Not Applicable

VIII. Counseling/Admission: Starting date of the course - 04.09.2023

#### **IX.** Important Dates (if applicable) :

Starting date:	04.09.2023
Last date to submit application form:	30-08-2023
Selection intimation in website:	31-08-2023
Counseling/Admission	04-09-2023
Commencement of class work:	05-09-2023
Payment of Fee	On or before
	04.09.2023

**X. Course Timings**: 9:40 Hrs to 17:00 Hrs (13:00 Hrs to 14:00 Hrs Lunch break)(Excl Saturdays, Sundays and National Holidays)

#### **XI. Placement** : Support shall be provided

- Lab Facilities: The IT Lab is equipped with Intel Xeon Dual Processor based servers from HP, IBM, DELL, HCL, managed gigabit switches and more than 100 networked PCs with internet facility. SaaS, PaaS and IaaS open source cloud servers. A variety of software is available which includes various flavors of Windows and Linux Operating Systems like RedHat Enterprise Linux/CentOS 6/7, RT Linux, OpenStack, CloudStack, OpenVAS/Nessus and various commercial and open source development tools, database and cloud servers.
- XII. Course Contents: Virtualization, Networking Basics, Linux Basics, Shell Scripting, Overview of Windows & its Security features, Overview of Mobile devices & its Security features, Overview of Information Security Introduction to Ethical Hacking, Threats, Vulnerabilities & attacks, Ethical hacking Phases, Malwares, hacking techniques, Host/Device Security, Network Security, Cryptography, Configuring, Securing and validating Server Services, Penetration Testing methodologies, Wi-Fi Security, Cloud Security and Project

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