



# Five-day Bootcamp on Ethical Hacking & Digital Forensics Organized by

Department of Computer Science & Engineering
National Institute of Technology Raipur
10<sup>th</sup>- 14<sup>th</sup> June, 2024









### ABOUT EHDE

This course is aimed at training cybersecurity enthuthiasts in identifying and reporting the findings, especially those related to security, vulnerabilities, exploits and digital forensics results in a legal and ethical manner. The course allows one to upscale and pursue a career in challenging, adventurous and rewarding field of Cyber Security & Digital Forensics. The proposed program is an instructor-led program, which aims to provide knowledge of realworld scenarios with hands-on experience on case studies to develop potential forensic skills. The course delves into the concepts of forensic investigation, security, OSINT tools, volatility framework, autopsy, scalpel, Nmap, DNS pharming, Hydra, Metasploit Framework, DoS attack, hashcat, etc., that are essential to become an advanced cybersecurity professional. The proposed program is designed to equip students and professionals aspiring to start a technical career in cyber security. This is a technical skilling program, essential to launch a professional career in the exciting domain of Cyber Security and Digital Forensics.

# ABOUT NIT RAIPUR

National Institute of Technology Raipur (An Autonomous institute of National Importance) fully funded by the Govt. of India. NIT Raipur is located in Raipur, the Capital City of Chhattisgarh State and spread over an area of approx. 100 acres. The institute is 5 km from Raipur railway station and 14 km from airport on NH-6, the Great Eastern Road. NIT Raipur has proven to be "avant-grade" in the field of science and technology over the past few decades in this region. NIT Raipur is ranked 70<sup>th</sup> in engineering category in India by the NIRF, and it is the highest ranked engineering college in Chhattisgarh. Presently NIT Raipur offers 12 undergraduate, 14 Postgraduate (including M.Sc., M.C.A and M.Tech. in Applied Geology) and 18 Ph.D. programs. The institute offers facilities for research and also undertakes R & D activities, provides testing, consultancy and other extension services including continuing education to the industry through the Industry Institute Interaction cell and the placement of the student through the Department of Training & Placement. The students have brought laurels to the institute and are very well placed in Government organization, Public and Private Sectors, Multinational Companies, Universities, research organizations in India and abroad. More details about NIT Raipur are at: http://www.nitrr.ac.in

## **OUTCOMES OF THE COURSE**

- Understanding of basic concepts of cyber and information security
- ✓ Ability to identify and respond to security incidents
- ✓ Demonstration of the Vulnerability Analysis and Penetration Testing (VAPT) including their countermeasures
- ✓ Understanding of forensics and anti-forensics techniques
- ✓ Demonstration of forensic approaches to Microsoft Windows and Linux artifacts.
- ✓ Analyze different disk drives and file systems used in different operating systems
- Developing skill set for entry-level positions as a digital forensic investigator

#### Eligibility Criteria for Participation

- ✓ UG/PG graduated/pursuing (final/pre-final year) students seeking cyber security skills
- ✓ Ph.D. Scholars from higher education institutions
- ✓ Faculties / Staffs / Lab Instructors from technical and academic institutions
- ✓ Govt. Employees or Industry/working professionals seeking cyber security skills
- ✓ Any other Cyber Security enthusiasts

# REGISTRATION DETAILS

**Registration Link:** 

https://forms.gle/jpH9j9JTw6eCmX818

or

Scan QR for Submitting Registration Form



#### COURSE CONTENTS

- Basics of Cyber Security
- Basics of Networking
- Cryptography and Hashing Techniques
- Vulnerability Analysis Process, Tools and Techniques
- Overview of Malicious Software
- Access Control Mechanism
- Digital Forensics: Process, Tools & Techniques and Research Challenges
- Understanding Hard Disks and File Systems (NTFS, FAT, Ext4, etc.)
- Data Acquisition: Imaging and Cloning
- File Systems Analysis using TSK
- Windows Forensics
- Anti-forensics and Anti-anti-forensics
- Volatile Memory Forensics
- Metasploit Framework
- Internet of Things (IoT) Forensics
- Email and DRONE Forensics
- Password Recovery Tools & Techniques
- Mobile Forensics
- App Forensics

### Course Timeline & registration

Registration Last Date: 15<sup>th</sup> May, 2024
List of shortlisted Candidates: 17<sup>th</sup> May 2024

Fee Payment Duration: 17<sup>th</sup> to 22<sup>nd</sup> May, 2024

Course Start Date: 10<sup>th</sup> June, 2024
Course End Date: 14<sup>th</sup> June, 2024





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#### CHIEF PATRON

Prof. N.V. Ramana Rao, Director, NITRR

# **PATRON**

Dr. Prabhat Diwan, Dean (R&C), NITRR

#### CHAIRMAN

Dr. Pradeep Singh, HoD, Department of CSE

## **ADVISORY COMMITTEE**

Prof. Naresh K Nagwani, Department of CSE Dr. Dilip Singh Sisodia, Department of CSE

# CO-ORDINATORS CONTACT DETAILS

- **1. Dr. Pradeep Singh**, Department of CSE, NITRR Email: psingh.cs@nitrr.ac.in
- **2. Dr. Nitesh K Bharadwaj**, Department of CSE, NITRR Email: nkbharadwaj.cse@nitrr.ac.in

Mobile No.: +91-9765379248

3. Dr. Shailendra Tripathi, Department of CSE, NITRR

Email: sktripahi.cse@nitrr.ac.in Mobile No.: +91-9993364581

#### SPEAKERS

Subject experts of Cyber Security & Digital Forensics may be from IIT, NIT, IIIT, NFSU, CDAC, DRDO and Industry.

#### **NUMBER OF PARTICIPANTS**

The number of participants in the couse is limited. Preference will be given to the candidates who have background in the field of Cyber Security or Digital Forensics, on first come

# CERTIFICATE

Certificate will be provided to all the participants at the end of bootcamp.

# ACCOUNT DETAILS

Account Name: National Institute of Technology,

Raipur

Account No.: 380278633250
Bank Name: State Bank of India

Bank Branch: NIT Branch IFSC Code: SBIN0002852

## REGISTRATION PROCESS

Submit the online registration form <a href="https://forms.gle/jpH9j9JTw6eCmX818">https://forms.gle/jpH9j9JTw6eCmX818</a>

- 1. Fill the required basic details
- Upload valid ID proof (Aadhar/Driving License/ Voter ID/Passport/Employee ID Card
- . Upload proof of qualifying degree/course.
- 4. Upload soft copy of passport photograph
- 5. Submit the form.
- After verification confirmation email and guidelines will be sent to the shortlisted candidates on 02 May. 2024
  - . The shortlisted candidates need to pay the course fee including GST on or before 10 May, 2024
- 3. Email fee receipt to the coordinators.

# FEE STRUCTURE

S. No.	Particulars	NITRR Students	External Students / NITRR Staff	Industry/Faculties and Staff from Education Institution/Govt. Em- ployees
1	Course Fee	INR 3000/- + 18% GST (INR 3540/-)	INR 4000/- + 18%GST (INR 4720/-)	INR 5000 + 18% GST (INR 5900/-)
2	Accommodation Charges Extra (Subject to availability in hostel)/ (Optional)	No TA/DA will be provided for attending the course.		
3	Food Charges Extra (Optional)	NA	On Payment Basis (INR 250/- per day)	