

### 15-Day Workshop on Ethical Hacking & Digital Forensics Organized by

Department of Computer Science & Engineering National Institute of Technology Raipur 27<sup>th</sup> January – 12<sup>th</sup> February, 2025



### ABOUT EHDF

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

#### ligibility Criteria for Participatio

- ✓ 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

## **RECISTRATION DETAILS**

### **Registration Link:**

### https://forms.gle/CXMJVMP2iSbRzmgx6

### 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
- Browser Forensics

# COURSE TIMELINE & REGISTRATION

Mode of Instruction:	<b>Online Mode</b> (06:00 PM to 08:00 PM)
Registration Last Date:	23th January, 2025
Intimation of Acceptance:	25 <sup>th</sup> January 2025
Course Start Date:	27 <sup>th</sup> January, 2025
Course End Date:	12 <sup>th</sup> February, 2025



### **CHIEF PATRON**

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

### PATRON

Dr. G. P. S. C. Mishra, 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. Aakanksha Sharaff, Department of CSE, NITRR Email: asharaff.cs@nitrr.ac.in Mobile No.: +918817813946
- 3. **Dr. Nitesh K Bharadwaj**, Department of CSE, NITRR Email: nkbharadwaj.cse@nitrr.ac.in Mobile No.: +91-9765379248

# **15-Day Workshop on Ethical Hacking & Digital Forensics**

Organized by Department of Computer Science & Engineering National Institute of Technology Raipur 27<sup>th</sup> January – 12<sup>th</sup> February, 2025

## 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:Director NIT RaipurAccount No.:38027633250Bank Name:State Bank of IndiaBank Branch:NIT BranchIFSC Code:SBIN0002852



## **REGISTRATION PROCESS**

Submit the online registration form <u>https://forms.gle/CXMJVMP2iSbRzmgx6</u>
1. Fill the required basic details
2. Payment of the Course Fee
3. Upload receipt of the fee payment
4. Upload valid ID proof (Aadhar/Driving License/ Voter ID/Passport/Employee ID Card
5. Submit the form.

# 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 1000/- + 18% GST (INR 1180/-)	INR 1500/- + 18%GST (INR 1770/-)	INR 2500 + 18% GST (INR 2950/-)
2	Accommodation and Food	No TA/DA will be provided for attending the course.		



CONTINUING EDUCATION CELL NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G.E. Road, Raipur – 492010 (C.G.) Ph- (0771)2253934

# ACCOUNT DETAILS FOR ONLINE PAYMENT

Bank Name:	State Bank of India
Account Number	38027633250
Account Holder Name	Director NIT Raipur
Branch Name and Address	NIT Branch, G. E. Road Raipur, Chhattisgarh 492010, India
IFSC Code	SBIN0002852
MICR Code	492002004
Swift Code	SBININBB646
PAN Card Number	AAAJN0643G
GSTIN Number	22AAAJN0643G1ZN