



TECNIA INSTITUTE OF ADVANCED STUDIES

NAAC ACCREDITED GRADE "A" INSTITUTE

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**Department of Information
Communication & Technology**

**Report
On
Value Added Course: Certificate in Ethical Hacking**

ACTIVITY : Value Added Course

TITLE : Certificate in Ethical Hacking

VALUES: Domain Knowledge; Modern Tool Usage; Professional Ethical Edification

LEARNING OUTCOMES: Ability to recall information, facts, definitions, jargons, technical terms, classifications, categories and criteria; Understanding, grasping meaning and information, Acquainted with internet; Demonstrate correct usage of method or procedure; identify vulnerabilities in computer systems, networks, and applications, identify weaknesses that could be exploited by attackers, to exploit vulnerabilities ethically, Use Hacking Tools and Techniques, Understand Exploit Mitigation and Countermeasures, Apply Ethical and Legal Principles; Enhance Security Awareness and Risk Management

Organized by : Department of Information Communication & Technology

Program Theme : Value Added Course of Ethical Hacking

External Expert : Mr. Harsh

HoD
BCA-TIAS

Dr. Deepak Sonkel
HOD ICT

Date : 03-01-2022

Time : 5:00 pm onwards

Venue : Online, MS Team

Poster/Flyer/Notice*

TECNIA
INSTITUTE OF ADVANCED STUDIES
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ESTD 1989

Department of Information
Communication & Technology

Ethical Hacking

Certificate in Ethical Hacking

Duration: 30 Hours
Timing: 5:00 to 7:00 P.M

Preface:
Value Added Course are augmented as per NEP 2020, Emphasize Modern Tool Usage, Learners to up-skill their skillsets, Bridging the gap between academia and corporate requirements, VAC Certificate in Office Automation will be able to attain as under:-

- Broadening of Domain Knowledge
- Apply techniques of appropriate software's validation
- Acquire technical skills to lead as productive IT Professional
- Enhancing Employability

Learning Outcomes:
At the end of this Course student will be able to:-

- Foundations of Cyber Security Concepts
- Cryptography and Cryptanalysis
- Infrastructure and Network Security
- Cyber Security Vulnerabilities & Safe Guards

Note:

- Batches will commence w.e.f 03.01.2022 at 5:00 P.M. .
- Each batch shall comprise of 60 students only.
- Minimum 80% attendance is required by the candidate for assessment.
- Assessment will be made on the basis of Viva Voce, PCA and Written/Practical Exam on 29.01.2022.
- Successful learners after assessment will get the certificate of the VAC.

Resource Person
Mr. Harsh

Registration
Date: 23.12.2021

VAC Contents :

- Introduction to Ethical Hacking. (2 Hrs)
- Networking Fundamentals. (3 Hrs)
- Information Gathering and Footprinting. (4 Hrs)
- Scanning and Enumeration. (3 Hrs)
- System Hacking. (2 Hrs)
- Web Application Security. (4 Hrs)
- Cryptography. (2 Hrs)
- Social Engineering. (2 Hrs)
- Wireless Security. (3 Hrs)
- Incident Response and Digital Forensics. (3 Hrs)

For any queries related for the VAC Certification course, Please Feel Free to Contact
Dr. Y.P. Singh
VAC Coordinator

Social media link (promoting in any one Facebook/Instagram/Twitter is mandatory)	Link of facebook, Instagram
No. of Students* (only no. to be written, list in excel or word should be maintain at department level as proof for any further requirement)	112
No. of Faculty* (only no. to be written , list in excel or word should be maintain at department level as proof for any further requirement)	01
No. of External Participants (students +	6

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faculty) [write NA if not applicable]

(Geotag) Photograph*

Photograph of the Event with the Caption



Report: Description in (min 250 to max 800 words)*

Ethical hacking refers to the authorized practice of probing computer systems, networks, and applications with the intention of identifying vulnerabilities that malicious actors could exploit. Ethical hackers, often employed by organizations or working as independent security professionals, employ their skills and knowledge to simulate real-world cyber attacks in a controlled environment. The objective is to expose weaknesses and provide recommendations to improve security.

In an era dominated by digital landscapes and interconnected systems, the need for robust cybersecurity measures has become paramount. Ethical hacking, also known as penetration testing or white-hat hacking, plays a pivotal role in identifying vulnerabilities, strengthening security defenses, and safeguarding digital assets. This article delves into the world of ethical hacking, exploring its purpose, methodologies, and the

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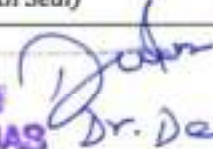
positive impact it has on cybersecurity.

Ethical hackers adopt various methodologies and techniques to uncover vulnerabilities and assess the overall security posture of target systems. Here are some common approaches used in ethical hacking:

1. **Reconnaissance:** Ethical hackers gather information about the target system, including its infrastructure, network architecture, and potential entry points. This reconnaissance phase helps identify potential vulnerabilities and aids in designing effective attack vectors.
2. **Vulnerability Assessment:** Ethical hackers utilize specialized tools and manual analysis to identify vulnerabilities within a target system. These assessments involve scanning for known vulnerabilities, analyzing system configurations, and evaluating patch levels. The findings are then used to prioritize and address vulnerabilities before they can be exploited by malicious actors.
3. **Exploitation:** Once vulnerabilities are identified, ethical hackers attempt to exploit them to gain unauthorized access or elevate privileges. The goal is not to cause harm but to demonstrate the potential impact of the vulnerabilities. By successfully exploiting weaknesses, ethical hackers provide valuable insights into potential attack vectors and weaknesses in the system's defenses.
4. **Social Engineering:** Ethical hackers also employ social engineering techniques to assess the human element of security. By exploiting human psychology and manipulating individuals through phishing, pretexting, or impersonation, ethical hackers test an organization's resilience against social engineering attacks. This helps identify gaps in employee awareness and training programs.

Ethical hacking has become an indispensable component of modern cybersecurity strategies. By leveraging the skills and knowledge of ethical hackers, organizations can identify vulnerabilities, strengthen security defenses, and protect their digital assets. Ethical hacking empowers organizations to stay one step ahead of cyber

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	threats, fosters a proactive security posture, and promotes trust and confidence in an increasingly interconnected digital world.
Resource Person Profile	Mr. Harsh is working in MNC as a Software Developer, he has 6 years of experience in Industry, his expertise in Ethical hacking, cyber security etc
Attendance Sheet*	<i>Attached at the end of Report</i>
Feedback	<i>Sample feedback Attached at the end of Report</i>
Report Submitted by Convener (write faculty coordinator name)	Mr. Harsh
<i>For Office Use</i>	
Signature of Event Coordinator	Signature of School/Department Head <i>(With Seal)</i>
<u>List of Beneficiary</u>	 HOD BCA-TIAS Dr. Deepak Kumar HOD ICT

Fields marked with '' are mandatory*