







CERTIFICATION PROGRAMME

On

Fundamental Concepts of Cyber Security

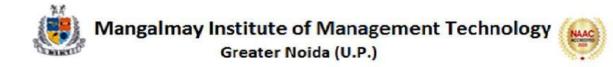
From

21-March-2023 to 09-May-2023 Convener: Mr. Abhay N Tripathi, Associate Professor For BCA 6th Semester

Resource Person

Ms. Nisha Pandey

Assistant Professor, MIET



Fundamental Concepts of Cyber Security

Duration: 30 Hours

Module: 1

Networking Concepts Overview- Basics of Communication Systems, transmission Media, ISO/OSI and TCP/IP Protocol Stacks, Local Area Networks, Wide Area Networks, Internetworking, Packet Formats, Wireless Networks, The Internet

Module: 2

Application Security- Database Security, E-mail Security, Internet Security, Firewall, VPN's, Access Control, Backups, Archival Storage of Data,

Security Threats- Hacking and attacking, DOS attack, Card and ATM security, Password management, Risk Management.

Module: 3

Security Issues- Hardware and software, Physical Security of IT Assets, CCTV, Access Control, Security Policy and Its development, www security policy, Email standards and security policy.

Module: 4

Security standards & Cyber Laws- ISO, Early warning & response, CERT, I.T. Act. 2000, Copyright Act, Patent Law, IPR, Cyber Law in India

Reference Books:

1. Cyber Security by Dr. O.N. Pandey, Katson Publication

2. Fundamentals of Cyber Security by Mayank Bhushan, BPB Publication

3. Introduction To Cyber Security - Guide To The World Of Cyber Security by Anand Shinde, Notion Press





Schedule Duration: 30 hours				
1.	Basics of Communication Systems, transmission Media	3:00-5:00 PM	21-03-2023	
2.	ISO/OSI and TCP/IP Protocol Stacks	3:00-5:00 PM	22-03-2023	
3.	Local Area Networks, Wide Area Networks	3:00-5:00 PM	28-03-2023	
4.	Internetworking, Packet Formats	3:00-5:00 PM	29-03-2023	
5.	Wireless Networks, The Internet, VPN's	3:00-5:00 PM	04-04-2023	
6.	Database Security, E-mail Security, Internet Security, Firewall	3:00-5:00 PM	05-04-2023	
7.	Access Control, Backups, Archival Storage of Data	3:00-5:00 PM	11-04-2023	
8.	Hacking and attacking, DOS attack	3:00-5:00 PM	12-04-2023	
9.	Card and ATM security, Password management, Risk Management	3:00-5:00 PM	18-04-2023	
10.	Hardware and software, Physical Security of IT Assets	3:00-5:00 PM	19-04-2023	
11.	CCTV, Access Control, Security Policy and Its development	3:00-5:00 PM	25-04-2023	
12.	www security policy, Email standards and security policy	3:00-5:00 PM	26-04-2023	
13.	ISO, Early warning & response.	3:00-5:00 PM	02-05-2023	
14.	CERT, I.T. Act. 2000, Copyright Act	3:00-5:00 PM	03-05-2023	
15.	Patent Law, IPR, Cyber Law in India	3:00-5:00 PM	09-05-2023	





	Deport		
Name of Activity	Report		
Date Date	Fundamental Concepts of Cyber Security21-March-2023 to 09-May-2023		
Venue	BCA Classroom		
Organized by	Computer Application Department		
Resource Person	Ms. Nisha Pandey, Assistant Professor, MIET		
Beneficiary	BCA 6th Semester (40 students)		
Coordinator			
Objective	This course on Cyber Security:		
	• To secure the information stored and conveyed, this is an		
	invaluable resource of any organization		
	• To update the knowledge of students in network security issues.		
Content	With the initiative of IQAC, Mangalmay Institute of Management and		
	Technology organized add on certification course on "Cyber Security".		
	Day1: The session started with Basics of Communication Systems,		
	transmission Media.		
	Day 2: In this session, the resource person discussed about ISO/OSI and		
	TCP/IP Protocol Stacks with their header formats.		
	Day 3: In this session, the student learned about the various types of		
	Networks and their standards.		
	Day 4: This session was focused on Internetworking, Framing of the		
	message and Packet Formats.		
	Day 5: In this session, the student learned about Wireless Networks, The		
	Internet, Virtual Private Netwroks.		
	Day 6: In this session, the resource person discussed about various types of		
	security: Database Security, E-mail Security, Internet Security, Firewall		
	Day 7: This session was focused on Access Control, Backups, Archival		
	Storage of Data		
	Day 8: The session focused on Hacking and attacking, Hacking methods,		
	DOS attack.		
	Day9: In this session, the student learned about the various types of Card		
	and ATM security, Password management, Risk Management.		
	Day 10: In this session, the resource person discusses about Hardware and		
	software, Physical Security of IT Assets Day 11: In this session, CCTV, Access Control, Security Policy and Its		
	development was discussed.		
	Day 12: In this session, the resource person discusses about www security		
	policy, Email standards and security policy		
	Day 13: In this session, ISO, Early warning & response was learnt.		
	Day 14:In this session, the resource person discussed about CERT, I.T. Act.		
	2000, Copyright Act.		
	Day 15: This session was on Brief about Patent Law, IPR, Cyber Law in		
	India.		
Outcome of	On completion of the programme :		
Activity	 The students gain the most comprehensive knowledge and skills in 		
1101111	the Network Security providing an opportunity to equip the		
	Network System Administrators & Information.		
	 To understand the security concerns, vulnerabilities, attacks and to 		
	plan and implement the desired e-Security solutions.		
	plan and implement the desired e Security solutions.		



Resource Person Profile

Name: Ms. Nisha Pandey, Asst. Professor, MIET Core Skills: C Programming, Automata Theory, Computer Networks, Operating Systems. Qualification: B.Tech, M.Tech Experience: 09 years Research Area: Computer Networks, IoT.



Figure 1 Ms. Nisha Pandey during her session

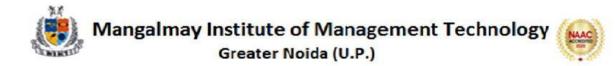


Figure 2 Ms. Nisha Pandey during her session



Certificate Template:





Corners?

Angalmay Institute of Management Technology Greater Noida (U.P.)

Course: BCA

ADD-ON COURSE QUIZ Course Name: Cyber Security Time: 30 Min Date:

Roll No:

Name: MD Danish

Year/Sem: III/VI

Invigilator's Sign:

Note: All questions are compulsory. Each question will carry '1' mark and there is no 'Negative Marking'

Q1. What does the term "phishing" refer to in cybersecurity?

A) A method of securing network traffic

B) An attempt to steal sensitive information by impersonating a trustworthy entity

C) A type of malware that spreads through email attachments

D) A technique used to encrypt data during transmission

Q2. Which of the following is NOT considered a strong password?

A) Password123

B) \$\$w0rd!

C) CorrectHorseBatteryStaple

D) Tr0ub4dor&3

Q3. What is the primary purpose of a firewall in network security2-

A) To prevent unauthorized access to a network

B) To encrypt data transmissions

C) To detect and remove malware from a network

D) To provide secure remote access to a network

Q4. Which of the following is an example of two-factor authentication?

A) Using a password and security questions to log in

B) Using a fingerprint scan and a password to log in

C) Logging in with a username and password

D) Answering a CAPTCHA before logging in

Q5. What is the main goal of ransomware attacks?

A) To steal sensitive information

B) To disrupt the operation of a system or network

C) To gain unauthorized access to a network

D) To extort money from victims by encrypting their data

Q6. Which of the following is a common type of social engineering attack?

A) SQL injection

B) DDoS attack

C Phishing

D) Cross-site scripting (XSS)

Q7. What is the purpose of encryption in cybersecurity?

A) To hide the identity of the sender

By To prevent unauthorized access to data by encoding it

C) To speed up data transmission over a network

D) To detect and remove malware from a system

Q8. What does the acronym "DDoS" stand for in the context of cybersecurity?

A) Digital Data Storage

B) Distributed Denial of Service

C) Data Destruction and Security

D) Direct Data Spoofing

Q9. What is a common method used to protect data trapspritted over public networks?

A) Network segmentation



D) Firewalls

Q10. What is the purpose of penetration testing in cybersecurity?

A) To test the speed of data transmission

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D) To monitor network traffic for suspicious activity

Q11. What is the role of a Security Information and Event Management (SIEM) system?

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B) To monitor network traffic for suspicious activity

C) To encrypt sensitive data

D) To manage user authentication and access control

Q12. What does the term "zero-day exploit" refer to in cybersecurity?

A) An attack that targets zero-day-old systems

B) An exploit that occurs zero days after a vulnerability is discovered

C) An attack that targets vulnerabilities that are unknown to the software vendor

D) A software vulnerability that has been exploited for zero days

Q13. Which of the following is a best practice for securing a wireless network?

A) Disabling encryption

B) Broadcasting the SSID

C/Using a strong password

D) Keeping the network open

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Q15. What is the main purpose of a Virtual Private Network (VPN)?

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Max. Marks: 15

Marks Obtained:



Name of Evaluator:

Niels landing.



Course: BCA

ADD-ON COURSE QUIZ Course Name: Cyber Security

Time: 30 Min Date:

Roll No:

Year/Sem: III/VI

Invigilator's Sign:___

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Name: Bardani

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Marks Obtained:

Name of Evaluator: Neisles landof

Sign.



Course: BCA

ADD-ON COURSE QUIZ Course Name: Cyber Security

Time: 30 Min Date:

Roll No:

Name: Varun Kumar Yaolas Year/Sem: III/VI

Invigilator's Sign:

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13

Name of Evaluator: Nulla Pauduy

Sign.



Course: BCA

ADD-ON COURSE QUIZ Course Name: Cyber Security Name: Vikash Chaudham

Time: 30 Min Date:

Roll No:

Year/Sem: III/VI Invigilator's Sign:

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Sign. How div

Name of Evaluator: Wishs Panduf

