

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)

Course: Understanding basics of cyber security	
Course Code: SEC381	Semester: III
Maximum Marks: 100	
Teaching Scheme	Examination Scheme
Lecture: 2	End semester Exam:0
Tutorial: 0	Attendance: 0
Practical: 0	Continuous Assessment: 0
Credit: 2	Practical/Sessional internal continuous evaluation: 0
	Practical/Sessional external examination: 100

Sl. No.	Course Objective	
1	Analyse and evaluate the importance of personal data its privacy and security.	
2	Analyse and evaluate the security aspects of social media platforms and ethical aspects associated with use of social media.	
3	Analyse and evaluate the cyber security risks.	
4	Based on the Risk assessment, plan suitable security controls, audit and compliance.	
5	Evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities and training.	
6	Increase awareness about cyber-attack vectors and safety against cyber-frauds.	
7	Take measures for self-cyber-protection as well as societal cyber-protection.	
	Course Outcomes	Mapped module/Unit
CO 1	After completion of this module, students would be able to understand the concept of Cyber security and issues and challenges associated with it.	U1
CO 2	Students, at the end of this module, should be able to understand the cybercrimes, their nature, legal remedies and as to how report the crimes through available platforms and procedures.	U1,U2
CO 3	On completion of this module, students should be able to appreciate various privacy and security concerns on online Social media	U1,U2,U3
CO 4	After the completion of this module, students would be able to understand the basic	U1,U3,U4

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)

	concepts related to E-Commerce	
CO 5	After the completion of this module, They will become familiar with various digital payment modes and related cyber security aspects, RBI guidelines and preventive measures against digital payment frauds.	U5
CO 6	Students, after completion of this module will be able to understand the basic security aspects related to Computer and Mobiles.	U6

Learning Outcome/Skills:

The candidate is able to have a detailed understanding of the importance of cyber world and the ways and means to survive in the cyber world.

Unit	Total Hours	% of Questions	Bloom's Taxonomy	Remarks, if any
THEORY				
U1	6	20	1, 2, 3	NA
U2	6	20	1, 2, 3	NA
U3	6	20	1, 2, 3	NA
U4	3	10	1, 2	NA
U5	6	20	1,2,3	NA
U6	3	10	1,2	NA
	30	100%		

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)

Course Code:	SEC381	
Course:	Understanding basics of cyber security	Credits:2.0
Contents		
Chapter	Name of the topic	Hours
Unit-I	<u>Introduction to Cyber security</u> Defining Cyberspace and Overview of Computer and Web-technology, Fundamentals of data communication and networking, Concept of cyber security, Information security goals (Confidentiality, Integrity and availability), Issues and challenges of cyber security	6
Unit-II	<u>Cybercrime and Cyber law</u> Cyber laws, What offences are covered under these laws (Hacking, Data theft, Identity theft (including Password Theft), Email spoofing, Sending offensive messages, Voyeurism, Cyber terrorism) Punishment for cybercrime in India, Reporting of cybercrimes: Organisations dealing with Cybercrime and Cyber security in India.	6
Unit-III	<u>Social Media Overview and Security</u> Introduction to Social networks. Types of Social media, Social media platforms, Social media monitoring, Hash tag, Viral content, Social media marketing, Best practices for the use of Social media.	6
Unit-IV	<u>E - C o m m e r c e</u> Definition of E- Commerce, Main components of E-Commerce, Elements of E-Commerce security, E-Commerce threats, E-Commerce security best practices	3
Unit-V	<u>Digital Payments</u> Introduction to digital payments, Components of digital payment and stake holders, Modes of digital payments- Banking Cards, Unified Payment Interface (UPI), e-Wallets, Unstructured Supplementary Service Data (USSD), Aadhar enabled payments, Digital payments related common frauds and preventive measures. RBI guidelines on digital payments and customer protection in unauthorized banking transactions. Relevant provisions of Payment Settlement Act 2007.	6
Unit-VI	<u>Digital Devices S e c u r i t y</u> Password policy, Security patch management, Data backup, Downloading and management of third-party software, Device security policy, Cyber Security best practices	3
	Total	30

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)

List of Books

Name of Author	Title of the Book	Name of the Publisher
Behrouz A. Forouzan	Data communication and Networking	McGraw Hill Education (India) Pvt. Ltd.
Mayank Bhushan	Fundamentals of Cyber Security	BPB Publications
Gupta & Gupta	Information Security & Cyber Laws	Khanna Publishing House
M.M. Oka	E-Commerce	Everest Publishing House.