

Semester Lecture Plan

Name of the college: Government College of Arts, Science and Commerce, Sanquelim - Goa

Name of Faculty: Shubham Naik

Subject: Computer Science

Division:

Paper code: VAC-110 Awareness of Cyber Crimes and Security

Program/Course: F.Y.B.Sc.

Total Lectures: 30

Academic year: 2024- 2025

Semester: I

Course Objectives:

This course is intended to:

Introduce to students the awareness of cybercrimes and cyber security – concepts, theory.

Covers various techniques which enable the student to analyse the threats and attacks due to cybercrimes.

Explains mitigation techniques and policies for cyber security.

Course Outcomes

Students will,

Aware of the various cybercrimes and will able to guide others.

Understand the global problems faced by individuals, organisations due to cybercrimes and attacks.

Apply the cyber security analysis to mitigate and prevent such attacks.

Student learning outcomes

To understand the basics of Cyber Crime against Individuals

To understand the basics of Cyber Crime against Organisations

To understand the basics of global perspective on Cyber crimes

To understand the basics of global perspective on Cyber Security

Month	Lectures	No. of lectures allotted	Topic, Subtopic to be covered	Experiment/Assignment	ICT Tools	Reference books

	From:	To:					
July	14/07/24	20/07/24	2	Unit 1: Cyber Crime against Individuals and Organisations Cyber Crime- Overview, Internal and External Attacks, Attack Vectors.	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,
	22/07/24	27/07/24	2	Cybercrimes against Individuals – E-mail spoofing and online frauds, Phishing and its forms, Spamming,	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,
	29/07/24	03/08/24	2	Cyber-defamation, Cyberstalking, Cyber Bullying and harassment,	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art

							and Science”, Pearson/PHI,	
Aug	05/08/24	10/08/24	2	Computer Sabotage, Pornographic offenses, Password Sniffing.Keyloggers and Screen loggers. Cyber Crimes against Women andChildren.	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; “Cyber Crime: Issues, Threats and Management”, 2004 2. Yar Majid; “Cybercrime and Society”, Sage Publications, 2006 3. Matt Bishop, “Computer Security Art and Science”, Pearson/PHI,	
	12/08/02	17/08/24	2	Cybercrime against organization – Unauthorized access of computer, Password Sniffing, Denial-of-service (DOS) attack,	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; “Cyber Crime: Issues, Threats and Management”, 2004 2. Yar Majid; “Cybercrime and Society”, Sage Publications, 2006 3. Matt Bishop, “Computer Security Art and Science”, Pearson/PHI,	

	19/08/24	24/08/24	2	Backdoors and Malwares and its types, E-mail Bombing, Salami Attack, Software Piracy,	Assignment	Microsoft PowerPoint Presentation	<ol style="list-style-type: none"> 1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,
	26/08/24	31/08/24	2	Industrial Espionage, Intruder attacks. Security policies violations,	Assignment	Microsoft PowerPoint Presentation	<ol style="list-style-type: none"> 1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,

Sept	02/09/24	07/09/24	2	Crimes related to Social Media, ATM, Online and Banking Frauds. Intellectual Property Frauds. Cyber Crimes against Women and Children.	Assignment	Microsoft PowerPoint Presentation	<ol style="list-style-type: none"> 1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI, 	
	09/09/24	14/09/24	2	Unit 2: Global perspective on Cyber crimes and Cyber Security A global perspective on cybercrimes, Phases of cyber-attack – Reconnaissance, Passive Attacks,	Assignment	Microsoft PowerPoint Presentation	<ol style="list-style-type: none"> 1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI, 	

	19/09/24	21/09/24	2	Active Attacks, Scanning, Gaining Access, Maintaining Access, Lateral movement and Covering Tracks. Detection Avoidance, Types of Attack vectors,	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,
	23/09/24	28/09/24	2	Zero-day attack, Overview of Network based attacks. Introduction to Cyber Security. Confidentiality, Integrity and Availability	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,

	30/09/24	05/10/24	2	Triad. Attacks: Threats, Vulnerabilities and Risk. Risk Management, Risk Assessment and Analysis.	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,
Oct	07/10/24	12/10/24	2	Information Classification, Policies, Standards, Procedure and Guidelines. Controls: Physical, Logical and Administrative;	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; "Cyber Crime: Issues, Threats and Management", 2004 2. Yar Majid; "Cybercrime and Society", Sage Publications, 2006 3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI,

	14/10/24	19/10/24	2	Security Frameworks, Defence in-depth: Layers of security. Identification and Authentication – Factors. Authorization and Access Controls- Models,	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; “Cyber Crime: Issues, Threats and Management”, 2004 2. Yar Majid; “Cybercrime and Society”, Sage Publications, 2006 3. Matt Bishop, “Computer Security Art and Science”, Pearson/PHI,	
	21/10/24	26/10/24	2	Methods and Types of Access Control.	Assignment	Microsoft PowerPoint Presentation	1. Jain Atul; “Cyber Crime: Issues, Threats and Management”, 2004 2. Yar Majid; “Cybercrime and Society”, Sage Publications, 2006 3. Matt Bishop, “Computer Security Art and Science”, Pearson/PHI,	
Assessment Rubrics	Component	Max Marks						
	ISA 1	5						
	ISA 2	5						
	ISA 3	5						
	Practical	NA						
	Project	NA						

	SEE	40						
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