

 SANKALCHAND PATEL UNIVERSITY ॥ अथातो ज्ञानजिज्ञासा ॥	Faculty of Engineering and Technology Master of Technology (Semester I / First year) In Effect from Academic Year 2023-24
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Branch Name:	CYBER SECURITY
Program Code:	ET207
Course Title:	Overview of Cyber Security Practical
Course Code:	2ET2070102P
Pre-requisite Course:	Student to get the knowledge about audit and information security management, which makes the student to get the real world experience. To learn and implement Data leakage in a website database.

Course Objectives:

The objective of this course is to learn cyber security concepts using various tools.

Teaching and Examination Scheme:

Teaching and Examination Scheme.													
Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								
					Theory (Marks)				Practical (Marks)				Total (Marks)
	L	T	P	Total	SEE		CCA		SEE		CCA		
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
1	-	-	2	2	-	-	-	-	10	25	10	25	50

Course Contents:

Unit	Details	Contact Hours
1	a. Audit security policy implementation in windows environment. b. Create a Demilitarized zone creation in Network environment for information security. c. Implement Resource harvesting attack and mitigation. d. Implement Window Patch management policy	8
2	a. Knowing the Behavior of Trojans and mitigation strategies. b. Create a metasploit and make it to implement c. Access control list creation and content filtering limiting the traffic. d. Data leakage in a website database and preventive measures	8
3	a. Password policy implementations and verification. b. Patch management implementation using MBSA tool on windows machine. c. Audit Policy management for users and computers log analysis.	8
4	a. Media handling policy implementation and event log analysis. b. Installation of Trojan and study of different options. c. Data leakage in a website database and preventive measures d. Network DOS attack and proof of bandwidth utilization and preventive steps	8

Reference Books:

1. CSX- cyber security fundamentals 2 nd edition, Published by ISACA, Cyber security, Network Security, Data Governance Security.
2. L. Sweeney, Computational Disclosure Control: A Primer on Data Privacy Protection, MIT Computer Science, 2002.

Course Outcomes:

At the end of the course, students will be able to:

Course Outcomes	Description	Bloom's Taxonomy Level
CO1	Analyze and implement Audit security policy in windows environment, create a Demilitarized zone creation in Network environment	Understanding (2)
CO2	Illustrate the Resource harvesting attack and mitigation, Window Patch management policy, Trojans and mitigation strategies	Understanding (2)
CO3	Build an Audit Policy management, Media handling policy and event log analysis and Installation of Trojan, Network DOS attack and proof of bandwidth utilization	Applying (3)
CO4	Explain the Data leakage in a website database, Password policy and verification, Patch management using MBSA tool on windows machine	Applying (3)

Mapping of CLO with PO and PSO

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes(PSOs)			
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4
CLO1	H	M	M		M											
CLO2	H	M			M							L				
CLO3	H	M	M		M											
CLO4	M	M	M		M							L				

H: High, M: Medium, L: Low