

 SANKALCHAND PATEL UNIVERSITY ॥ अथातो ज्ञानजिज्ञासा ॥	Faculty of Engineering and Technology Master of Technology (Semester II / First year) In Effect from Academic Year 2023-24
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Branch Name:	CYBER SECURITY
Program Code:	ET207
Course Title:	Ethical Hacking Practical
Course Code:	2ET2070208P
Pre-requisite Course:	Basic Concept of Cyber Security.

Course Objectives:

The main objective of this practical session is that students will get the exposure to various hacking and forensic tools.

Teaching and Examination Scheme:

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								Total (Marks)
					Theory (Marks)				Practical (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	Working with Trojans, Backdoors and sniffer for monitoring network communication	8
	Denial of Service and Session Hijacking using Tear Drop, DDOS attack	
	Penetration Testing and justification of penetration testing through risk analysis	
2	Penetration Testing and justification of penetration testing through risk analysis	8
	Malware – Keylogger, Trojans, Keylogger countermeasures	
	Understanding Data Packet Sniffers	
3	Windows Hacking – NT LAN Manager, Secure 1 password recovery	8
	Implementing Web Data Extractor and Web site watcher.	
4	Configuring Software and Hardware firewall.	8
	Firewalls, Packet Analyzers, Filtering methods.	

Reference Books:

1. Stuart McClure, Joel Scambray and Goerge Kurtz, “Hacking Exposed Network Security Secrets & Solutions”, Tata Mcgrawhill Publishers, 2010.
2. Bensmith, and Brian Komer, “Microsoft Windows Security Resource Kit”, Prentice Hall of India, 2010.

Course Outcomes:

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

Course Outcomes	Description	Bloom's Taxonomy Level
CO1	Will gain the knowledge to implement various security attacks.	Understanding (2) Applying (3)
CO2	Will get the ideas in various ways to trace an attacker.	Applying (3)
CO3	Will get the practical exposure to forensic tools.	Applying (3)
CO4	Learn various issues related to hacking.	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