

 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:	Digital Devices Security , Tools and Technologies for Cyber Security Practical
Course Code:	2ET2070206P
Pre-requisite Course:	Fundamental Knowledge of cyber security

Course Objectives:

Elements of Digital Devices Security, Tools and Technologies for Cyber Security.

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. To install & demonstrate nmap tool. b. To perform n-map tool for port scanning.	08
2	a. To install & demonstrate wireshark network analyzer b. Perform an experiment to demonstrate the use of Wireshark network analyzer to sniff for router traffic	08
3	a. To install & demonstrate Jcrypt Tool. b. To demonstrate asymmetric, symmetric crypto algorithm using Jcrypt tool.	06
4	a. To study Kerberos network authentication protocol b. To implement RSA algorithm using C. c. To study IT acts 2000.	10

Reference Books:

1. Richard E Smith, 2015, —Elementary Information Security, IInd Edition, Jones & Bartlett Learning Publisher.
2. Sean Philip Oriyano, 2010, —Hacker Techniques, Tools, and Incident Handling, Ist Edition, Jones & Bartlett Learning Publisher.
3. David Kim & Michael G. Solomon, 2016 —Fundamentals of Information Systems Security, IIIrd Edition, Jones & Bartlett Learning Publisher.

Course Outcomes:

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

Course Outcomes	Description	Bloom's Taxonomy Level
COL1	Students, after completion of this module will be able to understand the basic security aspects related to Computer and Mobiles.	Understanding (2)
COL2	They will be able to use basic tools and technologies to protect their devices.	Understanding (2)
COL3	They will become familiar with various digital payment modes and related cyber security aspects, RBI guidelines and preventive measures against digital payment frauds	Applying (3)
COL4	Student will understand the IT Act.	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