

 SANKALCHAND PATEL UNIVERSITY ॥ अथातो ज्ञानजिज्ञासा ॥	Faculty of Engineering and Technology Master of Technology (Semester II / First year) In Effect from Academic Year 2023-24
--	---

Branch Name:	CYBER SECURITY
Program Code:	ET207
Course Title:	E-Commerce, Digital Payments And Its Security Practical
Course Code:	2ET2070205P
Pre-requisite Course:	Basic Concept of Cyber Security

Course Objectives:

Mechanism of business transactions through electronic media. Payment transactions in a secured network.

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	a. ASV Scanning of E-commerce Environments Penetration b. Testing of E-commerce Environments c. Best Practices for Consumer Awareness	08
2	a. PCI DSS Validation Requirements b. Certificate Types (DV, OV, EV) and Associated Risks c. TLS 1.2 Configurations d. Merchant Questions on Certificate Types and TLS Migration Options	08
3	a. Brief History on SSL and TLS b. Selecting the Certification Authority c. Selecting the Appropriate Type of Public Key Certificates d. Tools for Monitoring and Managing E-commerce Implementations	08
4	a. Case Study One: Fully Outsourced Redirect b. Case Study Two: Fully Outsourced iFrame c. Case Study Three: Partially Outsourced (JavaScript-Generated Form) d. Case Study Four: Merchant Managed (API)	08

Reference Books:

1. Electronic Payment Systems for E-Commerce by Donal O'Mahony, Michael Peirce and Hitesh Tewari, Artech House, Computer Security Series.
2. David A. Buchanan, James McCalman, High Performance Work Systems: The Digital Experience, Routledge
3. David A. Montague, Essentials of Online payment Security and Fraud Prevention, Wiley

Course Outcomes:

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

Course Outcomes	Description	Bloom's Taxonomy Level
COL1	Understand the framework and anatomy of ecommerce applications and analyze ecommerce consumer, organizational applications	Understanding (2)
COL2	Infer mercantile process models from both merchant's and consumer's view point	Understanding (2)
COL3	Understand the implementation of Electronic Data Interchange (EDI) in day to day life	Applying (3)
COL4	Analyze different consumer, information searching methods and resource discovery and information retrieval techniques	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