



C. U. SHAH UNIVERSITY – WADHWAN CITY

FACULTY OF TECHNOLOGY AND ENGINEERING DEPARTMENT OF COMPUTER ENGINEERING M. TECH. SEMESTER: - I

SUBJECT NAME: Software Forensics (SFR)

SUBJECT CODE: 5TE01SFR1

Teaching & Evaluation Scheme: -

Subject Code	Subject Name	Teaching Scheme (Hours)				Credit	Evaluation Scheme							
		Th	Tu	Pr	Total		Theory				Practical (Marks)			Total
							Sessional Exam		University Exam		Internal		University	
							Marks	Hours	Marks	Hours	Pr/Viva	TW	Pr	
5TE01SFR1	Software Forensics	4	0	2	6	5	30	1.5	70	3.0	-	20	30	150

Objectives:

To provide understanding of software forensics and their use in the development of cybercrime for evidence techniques

Prerequisites:

Basic Knowledge of cryptography, computer programming and operating system concepts and computer security techniques

Course outline:

Sr. No.	Course Contents
1	Introduction to Software Forensics: Digital Forensic Definitions, objectives & objects of Software forensics, Software Forensic Tools, Software Forensic Technologies & Practices, Legal Considerations.
2	Overview of Computer Forensic Technology: Types of Software forensic technology, Types of Computer Forensics System,
3	The Players— Hackers, Crackers, Phreaks, and Other Doodz: Terminology: Type of Black hats, Motivations & Rationales, General Characteristics, and Black hat Products.
4	Software Code & Analysis Tools: The Programming Process, The Products, The Resulting Objects. The Analytical Tools: Forensic Tools.
5	Advanced Tools: Decompilation: Desquirr, DCC, Boomerang. Plagiarism: JPlay, YAP: Other Approaches.
6	Computer Forensics Evidence and Capture: Data Recovery, Evidence Collection and data Seizure, Duplication and Prevention of digitan Evidence

7	Law & Ethics: Legal Systems, Evidence & Ethics.
8	Computer Virus & Malware Concepts & Background: History of Computer Viruses & Worms, Malware Definitions & Structures, Detection & Antidetection Techquies.
9	Programming Cultures & Indicators: User Interface, Cultural Features & “HELP”,Functions, Programming Styles.
10	Stylistics Analysis & Linguistics Forensics: Biblical Criticism, Shakespere & Other Literature, Individual Identification & Authentication.
11	Authorship analysis: Problems, How can It Work?, Is it Reliable?

Learning Outcomes:

By completing this course student are practically aware with cyber crime and software forensics system, the tools like de compiler, reverse engineering aspect for forensics science

Books Recommended:

1. Software Forensics, **Robert M Slade**.
2. Computer Forensics computer crime sense investigation, **John R.Vacca**