GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Semester: III

M.E. Information Technology

Subject Name: **Software forensics (Major Elective – IV)**

Sr.No	Course content
1.	**Introduction to Software Forensics:** Digital Forensic Definitions, objectives & objects of Software forensics, Software Forensic Tools, Software Forensic Technologies & Practices, Legal Considerations.
2.	The Players— Hackers, Crackers, Phreaks, and Other Doodz: Terminology: Type of Black hats, Motivations & Rationales, General Characteristics, Black hat Products.
3.	Software Code & Analysis Tools: The Programming Process, The Products, The Resulting Objects. The Analytical Tools: Forensic Tools.
4.	Advanced Tools: Decompilation: Desquirr, DCC, Boomerang. Plagiarism: JPlay, YAP: Other Approaches.
5.	Law & Ethics: Legal Systems, Evidence & Ethics.
6.	Computer Virus & Malware Concepts & Background: History of Computer Viruses & Worms, Malware Definitions & Structures, Detection & Antidetection Techquies.
7.	Programming Cultures & Indicators: User Interface, Cultural Features & “HELP”, Functions, Programming Styles.
8.	Stylistics Analysis & Linguistics Forensics: Biblical Criticism, Shakespere & Other Literature, Individual Identification & Authentication.
9.	Authorship analysis: Problems, How can It Work?, Is it Reliable?

Reference Books:

1. Software Forensics by Robert M Slade.