CS4393 - Computer and Network Security

CS 4393 Computer and Network Security (3 semester credit hours) The study of security and vulnerabilities in computer and network systems. Common attacking techniques such as buffer overflow, viruses, worms, etc. Security in existing systems such as UNIX, Windows, and JVM. Fundamental access control and information flow concepts. Symmetric Ciphers such as DES and AES. Public-key encryption techniques and related number theory. Message authentication, hash functions, and digital signatures. Authentication applications, IP security and Web security. Prerequisite: (CE 4348 or CS 4348 or SE 4348) or equivalent. (3-0) Y