SE 451 : Secure Software Engineering

This course involves an in-depth study of the processes and techniques associated with secure software engineering. The objective is to plan, manage, document, and communicate security related aspects of different phases of a secure software development life cycle process to all stakeholders. Topics include secure software development life cycle processes, security requirements and their representation techniques and tools, security requirements engineering processes, secure design principles and guidelines and how to represent them effectively, threat modeling, risk analysis, inspection of requirements, design, and code to identify vulnerabilities, assessing the security posture of a secure software development artifact, secure implementation practices, and security testing techniques.

Credits 3
Lab Hours 0
Lecture Hours 3
Tutoring Hours 0
Prerequisites
SE 310, SE 330