

Information Security					
Credit Hours:	3	Course Code:	COSC-3102	Prerequisite:	None
Course Learning Outcomes (CLOs):					
At the end of the course, the students will be able to:				Domain	BT Level*
1. Knowledge of the concepts, models and terms commonly used in the area of Information security.				C	2
2. Understand the basic concepts and scientific thinking in information security.				C	3
3. Identify the current IT security issues.				C	4
4. Evaluate factors that influence the security of systems.				C	5
* BT= Bloom's Taxonomy, C=Cognitive Domain, P=Psychomotor Domain, A=Affective Domain					
Course Contents:					
Information security foundations, security design principles; security mechanisms, symmetric and asymmetric cryptography, encryption, hash functions, digital signatures, key management, authentication and access control; software security, malware, database security; network security, firewalls, intrusion detection; security policies, risk assessment, cybercrime, law, privacy and anonymity of data.					
Teaching Methodology:					
Lectures, Power Point Slides, Interactive Sessions, Extra Material, Projects, Presentations					
Course Assessment:					
Midterm Exam, Quizzes, Home Assignments, Projects, Presentations, Final Exam					
Reference Material:					
1. Network Security Essentials: Applications and Standards by William Stallings, Pearson; 5 th Edition, 2013; ISBN-13: 978-0133370430 2. Computer Networks: A system approach by Larry L. Peterson, Bruce S. Davie, Morgan Kaufmann; 5 th Edition, 2011; ISBN-13: 978-0123850591 3. Cryptography and Network Security by Behrouz A. Forouzan, Tata McGraw-Hill Education; 2 nd Edition, 2010; ISBN: 9780070702080 4. Introduction to Cryptography – Principles and Applications by Delfs and Knebl, Springer; 2 nd Edition, 2007; ISBN-13: 978-3540492436					