

IS382 Security Engineering Management				
Credit Hours:	3-0-3	Prerequisites	IS201	
Course Learning Outcomes:				
S No	CLO	Domain	Taxonomy Level	PLO
1.	Comprehend complex and unpredictable contexts to select security engineering management controls for an organization	Cognitive	2	1
2.	Analysis of complex, incomplete or contradictory evidence/data and argue for a scheme of risk management appropriate for an organization	Cognitive	4	2
3.	Develop original and creative critical responses to the task of developing an appropriate security engineering management system/Physical Security and Safety.	Cognitive	5	3
Course Content:				
<p>Information Security Management System (ISMS) Implementation, Industry Standard bodies (NIST), Industry Standards (International Organization for Standardization (ISO) and the International Electrotechnical Commission (ISO/IEC), BSI), Organization Security Levels, Organization Security Structure, Risk analysis and assessment, Information Assurance and Protection Mechanisms, Business Continuity Planning /Disaster Recovery Planning, Introduction to Incident Handling, Project Management and Initiation, Business Impact Analysis (BIA), Recovery Strategies, Plan Development and Implementation, Testing, Maintenance, Awareness and Training. IT Governance COBIT. Details of ISO standards for Security & Resilience (223xx series), Network Security (18028) and Systems Security Engineering (21827) and NIST framework for Cyber Physical Systems (SP 1500-201). The OSHA Act, Standards, and Liability, OSHA WISHA Inspections, Violations, Citations, Appeals, Fire and Emergency Egress, Confined Spaces, Accident and Incident Investigation, Root Cause Analysis, Accident Prevention.</p>				
Teaching Methodology:				
Lectures, Written Assignments, Semester Project, Presentations				
Course Assessment:				
Midterm Exam, Home Assignments, Quizzes, Project, Presentations, Final Exam				

Reference Materials:

. Cyber Security Management: A Governance, Risk and Compliance Framework by Peter Trim and Yang-Im Lee, 2014

. Information Security Management Handbook, 6th Edition by Harold F. Tipton and Micki Krause

In addition there will be lecture notes and selected articles.