MIS 6343 - Advanced Cybersecurity Management

Advanced Cybersecurity Management (3 semester credit hours) Security of IT systems and assets has become an important area of focus for organizations. While technology plays a key role in implementing IT security, managing enterprise IT security requires a cross functional set of skills and an understanding of the organization's security framework. Security is implemented as "defense in depth," and requires development of physical, technical, and administrative controls. Managers must have an in-depth knowledge of the eight security domains to plan and implement security for enterprise systems. This course provides an in-depth overview of security issues in enterprise systems. This course allows students to master cybersecurity concepts and topics including security and risk management (legal, regulatory compliance), asset security (data classification, ownership, data security and privacy), security engineering (security architecture, design, and security models), telecommunication and network security (perimeter protection, network attacks, IDS, IPS, firewalls), identity and access management (authentication, authorization, identity as a service), security assessment and testing, security operations (business continuity, disaster recovery, incident management, vulnerability and patch management), and software development security. This course is designed to prepare an individual with major concepts, topics, and their applications as preparation for the Certified Information Systems Security Professional (CISSP) exam. Prerequisite: MIS 6330. (3-0) S