Course Number	**ECS 6101**
Course Title	**Advanced Cyber Security**
Course Outline	Introduction to Computer Security and Privacy: security and privacy; types of threats and attacks; methods of defense
	Basics of cryptography, Authentication & key agreement, Authorization and access control
	Program Security: nonmalicious program errors; vulnerabilities in code, Secure programs; malicious code; Malware detection
	Internet security : IPSEC, TLS, SSh, Email security
	Wireless security: WEP, WPA, Bluetooth security,
	Web Security: XSS attack, CSRF attack, SQL Injection, DoS attack & defense
Learning Outcome	After completion of this course a student will have (i) Understanding of security issues in computer and networks, (ii) Understanding and analysis of internet security protocols (iii) Understanding and analysis of web security protocols
Assessment Method	Quiz / Assignment / ESE

Textbooks:

1. Computer Security: Principles and Practice: Dr. William Stallings and Lawrie Brown, Pearson
2. O'Reilly Web Application Security by Andrew Hoffman