



Extra Credit Course

Course Title: Cyber Security	Department : Computer Science	
Total Hours : 30 Hours	Credits: 2	
Course Pre-requisites/ Co-requisites	Basic Knowledge regarding Usage and access of Internet and Social Media	
Objectives:	<ul style="list-style-type: none">➤ Understand the cyber security threat landscape, various types of cyber-attacks, cyber-crimes, vulnerabilities and remedies.➤ Analyze and evaluate the importance of personal data its privacy and security.➤ Increase awareness about cyber-attack vectors and safety against cyber-frauds	
Expected Learning Outcome:	On completion of the course, <ul style="list-style-type: none">➤ Students will attain the technical knowledge and skills needed to protect and defend against cyber threats.➤ students will be aware of the responsibilities to access online social media networks	
Module 1	Overview of Cyber Security	6 Hours
Defining Cyberspace and Overview of Computer and Web-technology, Concept of cyber security, Issues and challenges of cyber security, Computer Ethics and Security Policies, Cyber Security Initiatives in India		
Module 2	Email and Password Security	6 Hours
Guidelines to choose web browsers, Antivirus, Email security, Guidelines for secure password and Wi-Fi security, Password Manager, Wi-Fi Security		
Module 3	Social media and Smartphone Security	6 Hours
Introduction to Social networks. Types of Social media, Challenges, opportunities and pitfalls in online social network, Security issues related to social media, Introduction to mobile phones Smartphone Security		

Module 4	Security of Digital payments	6 Hours
Definition of E- Commerce, Elements of E-Commerce security, E-Commerce threats, E-Commerce security best practices, Introduction to digital payments, Online Banking Security, Mobile Banking Security, Security of Debit and Credit Card.		
Module 5	Cyber security - Act	6 Hours
Cyber Security best practices, Cyber Security Threat Landscape, Cyber Security techniques, Hackers-Attacker—Countermeasures, Recovering from Information Loss, Destroying Sensitive Information, IT Act.		
Books <ol style="list-style-type: none"> 1. Donaldson, S., Siegel, S., Williams, C.K., Aslam, A., “Enterprise Cyber security -How to Build a Successful Cyber defense Program against Advanced Threats”, Apress, 1st Edition, 2015. 		
References <ol style="list-style-type: none"> 1. Charles P. Pfleeger Shari Lawrence Pfleeger Jonathan Margulies, Security in Computing, 5th Edition , Pearson Education , 2015 2. 2. George K.Kostopoulos, Cyber Space and Cyber Security, CRC Press, 2013. 		
Web References <ol style="list-style-type: none"> 1. Introduction to Cyber Security available at http://uou.ac.in/foundation-course 2. Fundamentals of Information Security http://uou.ac.in/progdetail?pid=CEGCS-17 		
Mode of Evaluation	Assessment Test-1 Assessment Test-2 Assessment Test-3	20% 20% 20%
Course Coordinators	<ul style="list-style-type: none"> • Mrs.A.Nesa Agnes Bellinta • Dr.J.Kavitha 	
Course Instructors	<ul style="list-style-type: none"> • Mrs. Siva Mahalakshmi, • Miss.S.M.A.Hameed Farhana • Miss.P.Divya 	