CYBER SECURITY COURSE CURRICULUM APRIL 2020 - MAY 2020

S. No.	Agenda	Content	Date & Time
1	Introduction class		05/04/2020 6:00 PM - 7:30 PM
1	Introduction	• Basic about Cyber security • TOP 5 risks • Trends on Cyber Security	06/04/2020 8:00 PM - 9:30 PM
2	OS & Networking	• OS fundamentals • Windows Commands Line • Linux Basic Commands • Basics of Communication Systems • Transmission Media • ISO/OSI and TCP/IP Protocol Stacks • Local Area Networks • Wide Area Networks • Internet working • Wireless Networks • The Internet (how it works!)	10-04-2020 6:00 PM - 7:00PM
3	Information Security Concepts	• Information Security Overview • Information Security Services • Types of Attacks • Goals for Security • E-commerce Security • Computer Forensics • Steganography • Security Engineering	13-04-2020 8:00 PM - 9:00PM
4	Security Management Practices	• Risk Management • Types of Cyber Crimes • Types of Hacker's • How to secure yourself	17-04-2020 6:00 PM - 7:00PM
5	Set up Lab Environment	• Installation of VM Ware / VM Box (Win/Mac) • Installation of Kali Linux • Installing Windows • Installing necessary Tool's and Update's • Installing tools for class	20-04-2020 8:00 PM - 9:00PM
6	Security Threats and vulnerabilities	Overview of Security threats • Hacking Techniques • Password Cracking • Endpoints	24-04-2020 6:00 PM - 7:00PM
7	Social Engineering	Phishing Introduction & Play with tools • Local Phishing	27-04-2020 8:00 PM - 9:00PM
8	Cryptography (Theory)	Introduction to Cryptography • Symmetric Key Cryptography • Asymmetric key Cryptography • Message Authentication and Hash	01-05-2020 6:00 PM - 7:00PM
9	Cryptography (Practical)	Introduction to Cryptography • Symmetric Key Cryptography • Asymmetric key Cryptography • Message Authentication and Hash	04-05-2020 8:00 PM - 9:00PM
10	Project	Minor Project Assessment	08-05-2020 6:00 PM - 7:00PM
11	Project	Minor Project Assessment	11-05-2020 8:00 PM - 9:00PM

12	Security Threats and vulnerabilities part 2 + Project	• Insecure Network connections • Malicious Code • Programming Bugs • Cybercrime and Cyber terrorism • Information Warfare and Surveillance + Major Project Assessment	15-05-2020 6:00 PM - 7:00PM
13	Social Engineering Part 2	• Social Phishing • Reverse Proxy (for 2FA) (optional)	18-05-2020 8:00 PM - 9:00PM
14	Cryptography (Theory) + Project	functions • Digital Signatures • Public Key infrastructure • Diffie-Hellman key exchange protocol • Applications of Cryptography + Major Project Assessment	22-05-2020 6:00 PM - 7:00PM
15	ProjectCryptography (Practical) + Project	functions • Digital Signatures • Public Key infrastructure • Diffie-Hellman key exchange protocol • Applications of Cryptography + Major Project Assessment	25-05-2020 8:00 PM - 9:00PM
16	Project	Major Project Assessment	29-05-2020 6:00 PM - 7:00PM