



Course Tracking Form

Student should ensure each topic in the course tracking form is covered before signing the forms, at the end of each class students should submit the forms to the Admin at the front desk before leaving and ensure to collect it before resuming class each day.

Student's Name:

Course Title:

Payment Status:

Class Schedule:

Instructor's Name and Signature:

Date:

Week	Module	Specific Objectives	Instructor's Signature	Student's Signature	Remark/ Complaint
Week 1	Introduction To Cybersecurity	<ul style="list-style-type: none"> Understanding Cybersecurity Understanding Cybersecurity as an Awareness Understanding Cybersecurity as a Professional Skill Fundamentals of Cybersecurity Evolution of Cyber Threats Cybersecurity domains Dangerous Cybersecurity myths Common Cyber-threats Mitigation Techniques Cybersecurity Tools Safe Keeping of Data Cybersecurity Profiles and Job roles Understanding Security Layers Understanding Risk Management in Cybersecurity Understanding Vulnerabilities 			

		<ul style="list-style-type: none"> • Security Policies and Frameworks (NIST, ISO 27001) 			
Week 2	NETWORKING FUNDAMENTALS	<ul style="list-style-type: none"> • Understanding Networking • Understanding Networking Devices • Understanding End-Devices • Understanding The OSI Model • Physical Layer of the OSI Model • Data Layer of the OSI Model • Network Layer of the OSI Model • Transport Layer of the OSI Model • Session Layer of the OSI Model • Presentation of the OSI Model • Application of the OSI Model • Understanding Network Ports • What is a TCP Port • What is a UDP Port • Understanding Internet Protocol • ARP • FTP • SMB • TELNET • HTTP • 			
Week 3	IP Addressing (simulated and live networks)	<ul style="list-style-type: none"> • Understanding IP address • Understanding CIDR Prefix • Understanding Subnet Mask • Understanding Gateway • Understanding DNS 			

		NETWORK TROUBLESHOOTING <ul style="list-style-type: none"> • What is Network Troubleshooting • Troubleshooting with Ping • Troubleshooting with Traceroute • Troubleshooting with NSLOOKUP • Troubleshooting with Angry IP Scanner • 			
Week 4	VIRTUALIZATION	Understanding Virtualization Forms of Virtualization What is a Hypervisor Server Virtualization Machine Virtualization (VMs) Virtual CPU Memory, Storage and Network •			
Week 5	OPERATING SYSTEMS ADMINISTRATION	<ul style="list-style-type: none"> • Understanding Operating Systems • The world of Operating Systems • Understanding Unix and Unix-like • Understanding Linux, GNU and Kernels • Understanding Terminals and Shells • Understanding GUI & CLI 			

		<ul style="list-style-type: none"> • Understanding the scope of System Administration <p>WINDOWS ADMINISTRATION</p> <ul style="list-style-type: none"> • Understanding Operating Systems • The world of Operating Systems • Understanding Unix and Unix-like • Understanding Linux, GNU and Kernels • Understanding Terminals and Shells • Understanding GUI & CLI • Understanding the scope of System Administration 			
Week 6	LINUX ADMINISTRATION	<ul style="list-style-type: none"> • Understanding Linux Distros • Explore Linux using Ubuntu • Setting up Ubuntu with Updates and Upgrades • Exploring the Linux File System • Introducing The Manual • Navigating & Searching the MAN Page • The Root Directory • Home Directory • PWD Command • LS Command • Removing Files and Files • Copying Folders and Files • Renaming Folders and Files 			

		<ul style="list-style-type: none"> • Exploring Linux network configuration Commands • Understanding the User Privilege • Understanding the Administrator Privilege (sudo) • Exploring other utility tools in Ubuntu-Linux 			
Week 7	CLOUD SECURITY AND AWS ELASTIC CLOUD COMPLETE EC2	<ul style="list-style-type: none"> • Introduction to Cloud Computing and Security • AWS Budget Setup • EC2 Basics • Create an EC2 • Create an EC2 instance with Ec2 • EC2 Instance Types Basics • Security Groups & Classic Ports • SSH • SSH using Linux • SSH using Windows • EC2 Instance Connect • EC2 Kali Linux AMI • SSH into Kali Linu • 			
Week 8	INTRODUCTION TO PYTHON BASICS	<ul style="list-style-type: none"> • Installing Python, Pip and Jupyter Notebooks • Python Variables • Python strings • Python Booleans • Python Operators • Python Lists 			

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| | | <ul style="list-style-type: none">• Python Tuples• Python sets• Python Dictionaries• Python if else• Python while and for loops• Python functions• Python modules | | | |
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Week	Module	Specific Objectives	Instructor's Signature	Student's Signature	Remarks/Completion
Week 9	INTRODUCTION TO ETHICAL HACKING	<ul style="list-style-type: none"> • Understanding Ethical Hacking • Ethical Hacking Methodologies (OSSTM, OWASO, and PTES) • Ethical Hacking vs. Cracking • The Hacker Mindset • Understanding Social Engineering • Introducing Kali Linux • Understanding Penetration Testing • Pentesting Processes • Understanding Reconnaissance and Information Gathering • Obtaining IP address, Physical 			

		<p>Address using Whois Tools</p> <ul style="list-style-type: none"> • Discovering Technologies used on the Website • Gathering Comprehensive DNS information • Discovering Websites on the same Server • Discovering Subdomains • Discovering Sensitive Files • Analyzing Discovered Files 			
Week 10	NETWORK HACKING ~ PRE-CONNECTION ATTACKS	<ul style="list-style-type: none"> • Connecting a Wireless Adapter to Kali • Understanding MAC address and how to change it 			

- Wireless Modes
(Managed and Monitor)
- Packet Sniffing
- WIFI Bands – 2.4 GHz & 5GHz Frequencies
- Targeted Packet Sniffing
- De-authentication Attack
(disconnecting devices from networks)

**NETWORK HACKING ~
GAINING ACCESS-
WPA/WPA2 CRACKING**

- Introduction to WPA and WPA2 cracking
- Hacking WPA and WPA2 without a Wordlist
- Capturing the Handshake
- Creating a Wordlist

		<ul style="list-style-type: none"> • Cracking WPA and WPA2 using a Wordlist Attack • 			
Week 11	PHISHING ATTACKS	<ul style="list-style-type: none"> • Introduction to Phishing • Cloning website & uploading them to the Cloud • Creating a fake Login page on the Cloud • Modifying the Page to capture login Information • Harvesting Facebook Login using identical Fake Login • Domain Names & Domain Basics • Linking Domain Names to Phishing Pages • Introduction to HTTPS 			

		<ul style="list-style-type: none"> • Enabling HTTPS on Phishing Pages 			
Week 12	CREATING WINDOWS TROJANS	<ul style="list-style-type: none"> • Introduction to Trojans • Creating Basic Trojan • Improving Trojan's icon and Behavior • Creating Python keyloggers CREATING APPLE MAC & LINUX TROJANS <ul style="list-style-type: none"> • Generating a Basic Apple and Linux Backdoor • Hacking Apple MAC OS using a Trojan • Hacking Linux using a Trojan Backdoors 			

Week 13	ADVANCE MALWARE DELIVERY	<ul style="list-style-type: none"> • Installing a File Sharing Service on the Cloud • Manipulating Shared Files on the Cloud • Hiding/Replacing Files types and Extensions 			
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