

Teaching Plan

Term Oct 2022

Module Name SERVER & CLOUD SECURITY

Credit Units 4

Module Leader SUN LEI

Contact 60 Hrs **with 8 OAL Sessions**

Wk	Begin Date	Topics	Activity/Session 1	Activity/Session 2	Assessment
1	17 Oct	Module Overview Server Security Basics	<ul style="list-style-type: none"> - Server Roles - Server Attack Vectors - Defense-in-Depth - Disaster Recovery 	Practical: Deploying Windows Servers	
2	24 Oct	Securing Windows Server - 1	LinkedIn Learning - Securing Windows Server 2019 <ul style="list-style-type: none"> - Server Hardening - Secure the Network 	Practical: Configure HTTP Web Service	
3	31 Oct	Securing Windows Server - 2	LinkedIn Learning - Securing Windows Server 2019 <ul style="list-style-type: none"> - Secure File Services - Manage Privileged Identities - Configure Advanced Audit Policies 	Practical: HTTPS and Certificate Life Cycle	
4	07 Nov	Cloud Security Basics	<ul style="list-style-type: none"> - Overview of Virtualization and Cloud Computing - Cloud Deployment Models and Service Modules - Shared Responsibility Model - Identity and Access Management (IAM) 	Practical: Using Resource-Based Policies to Secure an S3 Bucket	
5	14 Nov	Whitespace Week	Whitespace Week	Whitespace Week	
6	21 Nov	Cloud Data Security	<ul style="list-style-type: none"> - Protect Data at Rest - Protection through Encryption 	Practical: Encrypting Data at Rest by Using AWS KMS Quiz 1 - 10%	

7	28 Nov	Cloud Operations Security	<ul style="list-style-type: none"> - Security Operations Functions - Importance of logging and monitoring - Capture and collect - Monitor and report - Best practices for logging and monitoring - Additional AWS services for logging and monitoring - Identifying an incident 	Practical: Monitoring and Alerting with CloudTrail and CloudWatch	
8	05 Dec	Topics from Weeks 1 to 7	Topics from Weeks 1 to 7	Topics from Weeks 1 to 7	
9	12 Dec	Common Test	Common Test (30%)	Common Test (30%)	
10	19 Dec	Break			
11	26 Dec	Break			
12	02 Jan	Future Trends of Security: AI & ML	Machine Learning Basics	Practical: Supervised & Unsupervised Machine Learning	
13	09 Jan	AI & ML Use Cases in Security	Artificial Intelligence for Cybersecurity	Practical: Splunk Search, Correlation & Attack Detection	
14	16 Jan	Whitespace Week	Whitespace Week	Whitespace Week	
15	23 Jan	Assignment	Assignment	Quiz 2 - 10%	
16	30 Jan	Assignment	Assignment	Assignment	
17	06 Feb	Assignment Presentation	Assignment Presentation	Assignment Presentation	
18	13 Feb	Study & Exam Week			
19	20 Feb	Study & Exam Week			

Holiday:

24 Oct - Deepavali
 26 Dec - Christmas Day
 02 Jan - New Year's Day
 23 Jan - Chinese New Year
 24 Jan - Chinese New Year

Notes on Teaching Plan: