Capstone Project – Cyber Security

Session No#	Session Type & Mode	Session Type	Week -Day no#	Duration Hrs
1	PM -Sync	Discuss the following Explain the SDLC Explain Agile Project Management Project Life cycle for Cyber Security Project	1-1	3
3	PI -Sync	Project Plan Project scope & Project schedule Explain the Cyber Security project tasks Kick start the Project	1-2	3
4	PM -Async	Complete the Project plan	Before next sync session	2
5	PI -Sync	Project Brief – Task 1 - Security Assessment & Threat Analysis	2-3	3
6	PM -Async	Complete Task 1 • Conduct a risk assessment of the company's IT infrastructure. • Identify potential cyber threats and attack vectors.	Before next sync session	2
7	PI -Sync	Project Brief – Task 2 - Network Security Hardening	2-4	3
8	PM -Async	Complete task 2 • Implement firewall rules to prevent unauthorized access. • Configure intrusion detection and prevention systems (IDS/IPS).	Before next sync session	2
9	PM -Sync	Project Brief – Task 3 - Cloud Security Implementation	3-5	3
10	PI -Async	Complete task 3 • Apply identity and access management (IAM) policies in cloud environments. • Implement data encryption and secure storage mechanisms.	Before next sync session	2
11	PM -Sync	Project Brief -Task 4 - Ethical Hacking & Penetration Testing	3-6	3
12	PI -Async	Complete task 4 • Conduct vulnerability assessments on critical systems. • Simulate common cyber-attacks (phishing, brute-force, SQL injection).	Before next sync session	2
13	PM -Sync	Project Brief -Task 5 - Log Management & SIEM Deployment	4-7	3
14	PI- Async	Complete task 5: • Configure a Security Information and Event Management (SIEM) tool. • Analyze log data to identify security events.	Before next sync session	2

15	PM -Sync	Project Brief -Task 6 - Threat Intelligence & Threat Hunting.	4-8	3
16	PI- Async	Complete task 6: • Utilize threat intelligence feeds to detect emerging threats. • Perform threat hunting using security tools.	Before next sync session	2
17	PM-Sync	Project Brief -Task 7 - Incident Detection & Response	5-9	3
18	PI-Async	Complete task 7: • Design an incident response plan for cyber-attacks. • Investigate a simulated security breach and document findings.	Before next sync session	2
19	PM-Sync	Project Brief -Task 8- Forensic Analysis & Evidence Collection	5-10	3
20	PI-Async	Complete task 8: • Conduct digital forensic analysis on compromised systems. • Preserve digital evidence for legal and compliance purposes.	Before next sync session	2
21	PM-Sync	Project Brief -Task 9- Security Compliance & Governance	6-11	3
22	PI-Async	Complete Task 9 • Align security measures with regulatory frameworks (ISO 27001, NIST, GDPR). • Conduct a security audit and prepare a compliance report.	Before next sync session	2
23	PM-Sync	Project Brief -Task 10 - Final Cybersecurity Report & Presentation	6-12	3
24	PI-Async	Complete Task 10 • Prepare a comprehensive security assessment report. • Present findings and recommendations to key stakeholders. Submit Project Report	Before assessment	2
25	SA-Sync	Summative Assessment (Per learner)		30 min

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