Cyber Security, AAS

Program Learning Outcomes (PLOs)	Measurable Student Learning Outcomes (MSLOs)- PLO Alignment													
	CIS115	CIS119	CIS120	CIS121	CIS123	CIS130	CIS153	CIS176	CIS213	CIS225	CIS252	CIS253	CIS273	CIS275
1. (Create Level) Design and construct a secure and efficient network, including hardware and software. (CSLO 2)	✓	✓	✓		✓			✓		✓				
2. (Understand Level) Identify types of Cryptoanalysis, types of Cryptographic attacks and effective countermeasures. (CSLO 4)					✓			✓		✓				
3. (Application Level) Manage users, groups, login security, and system resources in Linux. (CSLO 2)			✓	✓	✓		✓	✓	✓	✓	✓		✓	
4. (Understand Level) Explain each of the seven layers of the OSI model. (CSLO 4)		✓	✓			✓	✓		✓	✓	✓	✓	✓	✓
5. (Application Level) Install, customize, and troubleshoot workstations. (CSLO 2)		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓
6. (Understand Level) Demonstrate Professionalism and Discuss why it is important. (CSLO 4)		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
7. (Application Level) Install and test the most current version of Windows server and Windows workstation, including users, DNS, and trust relationship.(CSLO 2)		✓	✓	✓										
8. (Analyze Level) Analyze network security options and techniques to create security plans.(CSLO 2)		✓		✓										
9. (Application Level) Install and customize the Windows operating systems, and evaluate the features, prominent system properties, and common operating system commands.		✓	✓	✓	✓									
10. (Synthesis Level) Create forensic investigation plans and demonstrate e-mail, social media, and cloud investigation techniques, per given case studies. (CSLO 4)						✓								
11. (Synthesis Level) Formulate, update, and communicate short- and long-term organizational cyber security strategies and policies. (CSLO 4)		✓	✓	✓	✓									
12. (Evaluation Level) Interpret networking laws and regulations in which businesses operate, including local, regional, and global markets. (CSLO 4)			✓											
13. (Application Level) Use several penetration testing applications. (CSLO 4)		✓			✓									

Cybersecurity Technician Certificate

Program Learning Outcomes (PLOs)	Measurable Student Learning Outcomes (MSLOs)- PLO Alignment					
	CIS153	CIS176	CIS213	CIS225	CIS273	CIS275
1. (Synthesis Level) Manage users, groups, login security, and system resources in Linux. (CSLO 2)			✓		✓	
2. (Analysis Level) Analyze advanced persistent threats and deploy countermeasures, and conduct risk and vulnerability assessments of planned and installed information systems. (CSLO 4)	✓	✓	✓	✓	✓	
3. (Evaluation Level) Interpret Networking laws and regulations in which businesses operate, including local, regional, and global markets. (CSLO 1)	✓			✓		✓
4. (Analysis Level) Determine which hardware, software, and data to gather and secure as evidence in a criminal case (CSLO 3)		✓		✓		
5. (Synthesis Level) Create and implement a network forensic plan. (CSLO 4)			✓		✓	✓
6. (Application Level) Demonstrate appropriate responses to various attack vectors and methodologies.(CSLO 3)	✓	✓	✓	✓	✓	

Computer Technician Certificate

Program Learning Outcomes (PLOs)	Measurable Student Learning Outcomes (MSLOs)- PLO Alignment					
	CIS115	CIS119	CIS120	CIS121	CIS123	CIS130
1. (Application Level) Install and configure Windows operating systems and maintain computer hardware components. (CSLO 2)		✓	✓	✓		
2. (Application Level) Manage users, groups, login security, and system resources. (CSLO 2)		✓		✓		
3. (Analysis Level) Identify, Configure, and troubleshoot devices. (CSLO 4)		✓		✓		
4.(Application Level)Configure, troubleshoot, and secure network devices.		✓		✓		✓
5.(Creation Level) Develop, test, and troubleshoot basic interfaces. (CSLO 4)			✓		✓	
6.(Application Level) Apply the basics of customer and team communications needed to solve problems. (CSLO 3)	✓				✓	
7.(Understanding Level) Understand individual and team dynamics and workflows to efficiently complete tasks.(CSLO 3)	✓					

Amazon Web Services Certificate

Program Learning Outcomes (PLOs)	Measurable Student Learning Outcomes (MSLOs)- PLO Alignment					
	CIS121	CIS123	CIS130	CIS210	CIS211	CIS263
1. (Analyze Level) Manage, secure, and scale compute instances, configurations, and databases. (CSLO 4)		✓				✓
2. (Apply Level) Build virtual private networks. (CSLO 4)		✓			✓	✓
3. (Create Level) Create and configure automated and repeatable deployments. (CSLO 2)						✓
4. (Evaluation Level) Analyze the marketing of cloud computing solutions and make recommendations. (CSLO 4)		✓		✓		
5. (Evaluation Level) Explore emerging Cloud Computing technologies and evaluate their possible impact on the industry. (CSLO 4)				✓	✓	
6. (Application Level) Use system utilities to effectively control the system. (CSLO 2,4)	✓				✓	✓
7. (Synthesis Level) Configure a network interface to use TCP/IP and TCP/IP routing. (CSLO 3)						
8. (Synthesis Level) Plan and create network file systems in Linux. (CSLO 4)						
9. (Create Level) Build and deploy secure applications in the AWS Cloud (CSLO 2)					✓	