

COURSE OUTCOME MATRIX

COURSE SYLLABUS

PART 2 of 3

Course Number and Title	IT184 Security+
-------------------------	-----------------

Credit Hours	3
--------------	---

Course Description	This course provides background in the fundamentals of networking security through vendor-independent security skill concepts that affect all aspects of networking. Topics include: basic networking concepts, protocols, networking devices, TCP/IP architecture, network security, encryption and firewall, IDS systems, social engineering, as well as implementation and diagnostic tools. This course may be used to help prepare for the Comp TIA Security + Certification.
--------------------	--

Prerequisite(s) and/or Corequisite(s)	IT 183 or IT 210
---------------------------------------	------------------

Required Textbooks/References/Course Materials:

TestOut Security Pro Labsim		UMUC	TestOut! Corporation	9781935080442
-----------------------------	--	------	----------------------	---------------

General Education Outcomes	
1	Utilize written and verbal language to discuss and comprehend information, incorporating a variety of technologies, such as text, data, and images (written language, verbal language, and information technology).
2	Identify and interpret relevant information in order to formulate an opinion or conclusion (critical thinking).
3	Demonstrate and communicate computational methods and mathematical reasoning in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate) (quantitative literacy and fluency).
4	Communicate in appropriate ways with those who are culturally diverse (intercultural competence).

Program/Department Outcomes	
1	Discuss and evaluate potential technology related ethical dilemmas and apply decision-making techniques to resolve them.
2	Demonstrate proficiency in selecting, implementing, and operating information technology solutions to meet project requirements.
3	Apply essential IT support skills in order to install, configure, secure, and troubleshoot operating systems, programs, networks, and pc hardware.
4	Prepared to take and pass industry standard certification exams
5	Develop the ability to use oral and written communication effectively with clients and other industry professionals.
6	Engage in teams to develop and/or implement IT-based project solutions
7	
8	
9	
10	

	Course Outcomes (CO)	Bloom's Domain for CO (C, A, P), Category, and Level	Program/Department Outcome(s)	Written Language	Verbal Language	Information Technology	Critical Thinking	Quantitative Literacy and Fluency	Intercultural Competence
1	Identify commonly used default network ports	C-Remembering (1)	1,2,3,4	2	2	2	2	0	0
2	Implement wireless network in a secure manner	C-Applying (3)	1,2,3,4	2	2	2	2	0	0
3	Execute disaster recovery plans and procedures	C-Applying (3)	1,2,3,4,5,6	2	2	2	2	0	0
4	Analyze and differentiate among types of application attacks	C-Applying (3)	3,4	2	1	2	2	0	0
5	Analyze and differentiate among types of mitigation and deterrent techniques	C-Applying (3)	3,4,5	2	1	2	2	0	0
6	Implement assessment tools and techniques to discover security threats and vulnerabilities	C-Analyzing (4)	3,4,5	2	2	2	2	0	0
7	Explain the importance of application security	C-Understanding (2)	2,3,4,5	2	2	2	2	0	0
8	Explain the function and purpose of authentication services	C-Understanding (2)	3,4,5	2	2	2	2	0	0
9	Implement appropriate security controls when performing account management	C-Applying (3)	1,2,3,4,5,6	2	2	2	2	0	0
10	Use and apply appropriate cryptographic tools and products	C-Evaluating (5)	3,4	2	1	2	2	0	0

Bloom's Domain Legend

C = Cognitive
A = Affective
P = Psychomotor

General Education Outcome Legend

2 = Included and Measurable
1 = Introduced and/or Minimally Addressed and Not Measurable
0 = Not included

Approved: May 2021
Reviewed: November 11, 2021