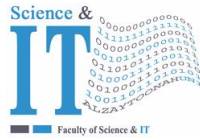


Matrix of Correlation Between Program Learning Outcomes and Courses – Procedure of Preparing and Updating Course Plan / Department of Cyber Security	QF01/0414-3.0
---	----------------------

Faculty	Science and IT	Department	Cyber Security	Program	Cyber Security
Plan Number	(2022/2021)	Date of Approval	2021\07\28	Number of Program Courses	41

Learning Outcomes (MK= Main Knowledge, MS= Main Skills, MC= Main Competences)	
Main Knowledge	
MK1	Knowledge of a broad and in-depth range of foundations, theories, principles and basic concepts in the field of cybersecurity
MK2	Knowledge and understanding of the processes, tools, techniques, policies and practices used in cybersecurity
MK3	Knowing, understanding and explaining the basic concepts of data networks, including components, layers, protocols, services, applications, and tools, and their relationship to cybersecurity.
MK4	Knowing and understanding the analysis of mathematical problems and methods of designing algorithms and evaluating their effectiveness and knowledge of the various data structures, uses, advantages and disadvantages
MK5	A wide range of specialized knowledge related to current and emerging developments and advanced topics in the field of cybersecurity
Basic Skills	
MS1	Analyze and evaluate various complex information in the field of cybersecurity.
MS2	Critically evaluate, select, and use cybersecurity techniques, methodologies, and tools to solve problems, reduce risks, and perform cybersecurity work
MS3	Performing a wide range of tasks and actions using cybersecurity tools in various complex operations; Creativity and innovation in this aspect
MS4	Using computational operations and quantitative methods to process data and information in various complex cybersecurity contexts
MS5	Using study, investigation, and research methodologies in cybersecurity projects and activities
General Competencies	
MC1	Independently manage tasks related to cyber security, work collaboratively and constructively, have the ability to lead, entrepreneur, and perform a wide range of tasks responsibly



جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية العلوم وتكنولوجيا المعلومات
Faculty of Science and Information
Technology



"عراقة وجودة"
"Tradition and Quality"

Matrix of Correlation Between Program Learning Outcomes and Courses – Procedure of Preparing and Updating Course Plan / Department of Cyber Security	QF01/0414-3.0
---	----------------------

MC2	Make constructive decisions in situations that require self-reliance to work, learn and innovate independently, and adhere to the ethics and standards of the profession for cybersecurity
MC3	Active participation in the development of cybersecurity specialization and community service.

Competencies			Basic Skills					Main Knowledge					Course Name	Course No.
MC3	MC2	MC1	MS5	MS4	MS3	MS2	MS1	MK5	MK4	MK3	MK2	MK1		
									✓			✓	Introduction to Information Technology	0125130
									✓				Statistics and Probability	0101140
									✓				Discrete Mathematics	0112110
												✓	Professional Skills for Scientific Faculties	0114150
									✓				Calculus (1)	0101101
					✓				✓	✓			Principles of Programming	0112120
					✓				✓	✓			Object Oriented Programming	0112220
									✓	✓			Internet Application Programming	0125220
										✓	✓	✓	Computer Networks (1)	0125131
											✓	✓	Principles of Cybersecurity	0125231

**Matrix of Correlation Between Program Learning Outcomes and Courses – Procedure
of Preparing and Updating Course Plan / Department of Cyber Security**

QF01/0414-3.0

Competencies			Basic Skills					Main Knowledge					Course Name	Course No.
MC3	MC2	MC1	MS5	MS4	MS3	MS2	MS1	MK5	MK4	MK3	MK2	MK1		
								✓			✓	✓	Data and Information Security	0125232
				✓	✓						✓		Infrastructure Security Using Linux	0125233
									✓				Data Structure and Algorithms	0125312
				✓	✓								Python for Cybersecurity	0125323
								✓				✓	Software Security	0125334
					✓								Internet Application Development	0114324
											✓	✓	Operating Systems	0112333
					✓		✓	✓			✓		Network Security	0125435
									✓			✓	Digital Logic Design	0112231
									✓		✓	✓	Cryptography	0125244
					✓	✓					✓		Ethical Hacking in Cybersecurity	0125248
										✓	✓	✓	Computer Networks (2)	0125245
				✓			✓					✓	Database Security	0125241
	✓			✓			✓					✓	Data Analytics	0125340

Matrix of Correlation Between Program Learning Outcomes and Courses – Procedure
of Preparing and Updating Course Plan / Department of Cyber Security

QF01/0414-3.0

Competencies			Basic Skills					Main Knowledge					Course Name	Course No.
MC3	MC2	MC1	MS5	MS4	MS3	MS2	MS1	MK5	MK4	MK3	MK2	MK1		
	✓	✓			✓			✓			✓		Data Integrity and Authentication	0125346
								✓		✓			Secure Communication Protocols	0125347
	✓					✓					✓		Digital Forensics	0125349
✓													Practical Training	0125481
													Methodology for Building A Secure System	0125471
✓		✓											Graduate Project	0125472
	✓		✓		✓	✓		✓			✓		Cybersecurity Tools and Techniques	0125371
					✓			✓			✓		Malicious Software (Malware)	0125361
		✓		✓					✓				Selected Topics in Cybersecurity	0125362
								✓	✓				Artificial Intelligence in Cybersecurity	0125463
					✓								Access Control and Authentication	0125464
					✓							✓	Cloud Computing Security	0125465
							✓						Operating Systems' Security	0125467

Matrix of Correlation Between Program Learning Outcomes and Courses – Procedure of Preparing and Updating Course Plan / Department of Cyber Security	QF01/0414-3.0
--	---------------

Competencies			Basic Skills					Main Knowledge					Course Name	Course No.	
MC3	MC2	MC1	MS5	MS4	MS3	MS2	MS1	MK5	MK4	MK3	MK2	MK1			
✓	✓												✓	Policy, Legal, Ethics and Compliance	0125468
					✓					✓			✓	Network Monitoring and Documentation	0125443
									✓					Linear Algebra	0101221
									✓					Numerical Analysis	0101272
								✓					✓	Principles of Artificial Intelligence	0142231

Approved by Course Plan Committee	2021/11/20م	In Meeting Number	2
Approved in the Department Council Meeting Number		Date of Meeting	
Signature of the Department Chair		Signature of the Dean	