



No.	Learning objectives and outcomes
O 1	<i>Introducing the student to the principles of cyber security in understanding, applying and analyzing security issues and finding appropriate solutions to them</i>
L O 1.1	<i>Analyze cybersecurity issues and theories.</i>
L O 1.2	<i>Understand cybersecurity principles and analyze security problems</i>
O 2	<i>Providing the student with the ability to analyze and deal with programs specialized in cybersecurity</i>
L O 2.1	<i>Knowledge of many programming methods and languages used in cybersecurity applications</i>
O 3	<i>Know the basic components of cybersecurity systems and protect networks from risks</i>
L O 3.1	<i>Knowledge of basic programs and tools in cybersecurity.</i>
L O 3.2	<i>Protect information and networks from various risks</i>
O 4	<i>Develop the student's ability to develop security solutions to protect networks and information from threats and intrusions</i>
L O 4.1	<i>Monitor networks and information and protect them from intrusions</i>
L O 4.2	<i>Know the different types of threats and ways to solve them with encryption and information security tools</i>
O 5	<i>Develop the student's idea of learning, deduction and making the right decisions in the concept of cybersecurity</i>
L O 5.1	<i>Ability to work as an analyst, designer and developer of security information systems.</i>
L O 5.2	<i>Develop the skill of dealing with site testing tools and how to write the report and conclusions.</i>
O 6	<i>Develop students' social and psychological skills and motivate them to work effectively within a team and contribute positively to society</i>
L O 6.1	<i>Strengthening the spirit of belonging</i>
L O 6.2	<i>Develop effective communication skills and team working skills</i>

Note :O= objective ,L.O. Learning outcome

Notes: The learning output number is defined by two digits; the first indicates the target number. The second number indicates the learning output sequence for each objective



L.O 6.2	L.O 6.1	L.O 5.2	L.O 5.1	L.O 4.2	L.O 4.1	L.O 3.2	L.O 3.1	L.O 2.1	L.O 1.2	L.O 1.1	Course name	Course No
								X		X	Introduction to IT	401102
										X	Calculus (1)	404101
								X		X	Statistics and Probability (1)	404131
X											Arabic (1)	205123
X											English language (1) skills	205125
	X										National Education	205110
										X	Linear algebra (1)	404241
							X	X			Computer Skills 2 / Science	401112
	X										Military Science	205107
							X	X			Programming language (1)	401211
				X			X	X			Simulation and modeling	401353
							X	X			Programming languages design and implementation	401452
										X	Linear algebra(2)	404341
			X				X				Graph theory	404463
							X	X	X	X	Introduction to Algorithms	401115



			X				X	X	X		Programming language (2)	401212
					X	X	X				Computer networks (1)	401224
				X			X	X			Data Structure	401251
			X	X		X	X		X		Data encryption	401334
		X	X				X				Artificial intelligence	401453
				X	X	X	X				Databases	406252
							X		X	X	Cybersecurity principles	407101
				X		X		X	X		E-commerce security	407105
				X		X				X	Risk management and assessment	407201
			X				X	X			Information security programming	407203
			X		X	X	X				Data and software security	407210
				X	X				X		Data analytics	407302
			X	X			X	X	X		Introduction to digital forensic evidence	407310
X				X	X	X					Security and protection of networks and their applications	407312
X					X	X			X		Network monitoring and documentation	407316
				X	X	X	X				Secure communication protocols	407322
			X		X	X	X		X		Ethical hacking	407325
		X	X	X			X	X			Internet application programming	407356
		X	X	X	X		X	X			Infrastructure security using Linux	407401
X		X	X	X		X					Field Training - Cybersecurity	407421



X		X	X	X		X		X			Graduation Project - Cybersecurity	407422
					X	X			X		Internet of things security	407202
			X	X			X	X	X		Cybersecurity systems	407214
				X		X	X				Confidentiality and privacy of data	407324
						X	X	X			Special Topics in Cyber Security	407327
					X	X	X	X	X		Distributed Computing Security	407338
		X				X	X	X	X		Security management of information systems	407410
		X	X	X	X						Penetration test	407412
					X	X					Wireless network security	407425
		X								X	Managing and structuring cyber security	407426
X		X		X							Special Topics in Cyber Security	407427
										X	Discrete mathematics	404152
					X	X	X				Networks and data transmission	407326