Study Plan for BachelorDegree in Cybersecurity Program for year 2020-2021

The Bachelor Degree in Cybersecurity Program awarded at Princess Sumaya University for Technology after the successful completion of 132 Credit Hours distributed as follows:-

University Requirements (27 CHs)

1. Compulsory Requirements (12 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
11100	Computer Skills (Remedial)	0		
31019	Arabic Language (Remedial)	0		
31029	English Language (Remedial)	0		
31111	Arabic Language	3	31019	
31121	English Language	3	31029	
31151	National Education	3		
31153	Introduction to Society, Technology and Environment Protection	0		
31154	Community Service	0		
31251	Military Science	3		

2. Elective Requirements (15 CHs)

2.1. Elective University Requirements (General) (6 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
20251	History of Science	3		
20252	Arab Islamic Scientific Heritage	3		
31100	Sports and Health	3		
31152	Arabic Islamic Civilization	3		
31161	Introduction to Library Science	3		
31211	Arabic Literature	3	31111	
31252	Governance and Development	3		
31261	Introduction to Politics and Economic Science	3		
31262	Introduction to Educational Science	3		
31271	Environmental Science	3		
31351	Contemporary Issues in the Arab World	3		
31352	Jerusalem : History and Facts	3		
31361	Introduction to Philosophy	3		
31371	Health Education	3		

2.2. Elective University Requirements (Scientific, Practical) (9 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
31130	Foreign languages	3		
31255	Entrepreneurship for Business	3	Finish 60 Credit Hours	
31311	Scientific Research Methods	3		
31373	21st Century Skills	3	Finish 60 Credit Hours	

School Requirements (25 CHs)

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1. Compulsory Requirements (25 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
11102	Introduction to Computer Science	3		
11103	Structured Programming	3	11102	
11151	Structured Programming Lab	1		11103
20132	Calculus (1)	3		
20133	Calculus (2)	3	20132	
20134	Discrete Mathematics (1)	3		
20200	Technical Writing and Communication Skills	3	31111,31121	
20233	Statistical Methods	3		
20234	Linear Algebra	3	20133	

Program Requirements (80 CHs)

1. Compulsory Requirements (68 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
11213	Data Structures and Algorithms for Cybersecurity	3	15230	
11323	Database Systems	3	15230	
11335	Operating Systems	3	15230	
11354	Database Systems Lab	1		11323
11355	Operating Systems Lab	1		11335
11449	Computer and Society	1	Finish 90 Credit Hours	
12241	Website Design And Web Graphics	3	11323	
15110	Cybersecurity Fundamentals	3	11103	
15230	Programming for Security Professionals	3	11103	
15231	Programming for Security Professionals Lab	1		15230
15232	Secure Assembly Coding	2	11103	
15233	Malicious Software Analysis	3	15232	
15320	Computer Networks Architecture and Virtualization	3	11335	
15321	Network Security and Protocols	3	15320	
15322	Network Security and Protocols Lab	1		15321
15330	Secure Coding	3	15233	
15331	Secure Coding Lab	1		15330
15360	Database Security	3	11323	
15361	Secure Systems Development and Design	3	11323	
15370	Cryptography Principles and Practice	3	15233	
15380	Information systems risk management	3	15110	
15420	Mobile and Wireless Security	3	15320	
15421	Network and Cloud Monitoring & Documenting	3	15321	
15450	Digital Forensics and Incident Response	3	11335	
15451	Digital Forensics and Incident Response Lab	1		15450
15460	Hacking Techniques and Intrusion Detection	3	15450	
15490	Practical Training	3	Finish 90 Credit Hours	
15491	Graduation Project1	1	Finish 90 Credit Hours	
15492	Graduation Project 2	1	15491	

Study Plan for BachelorDegree in Cybersecurity Program for year 2020-2021

2. Elective Requirements (12 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
14468	Security and Privacy of Big data	3	15330	
15260	E- Business Security	3	12241	
15362	Biometric Security	3	15110	
15422	Multimedia Security	3	11213	
15423	Cloud Computing Security	3	15321	
15430	Mobile Secure Coding	3	15330	
15431	Web Secure Coding	3	12241	
15432	Advanced System Administration—Windows Linux/UNIX Server	3	11335	
15440	Machine learning and Big Data	3	15330	
15441	Open Source Analysis	3	15330	
15442	Intelligent Threat Detection	3	15330	
15452	Advanced Forensics	3	15450	
15461	Smart Cards/Tokens Security and Applications	3	15110	
15470	Advanced Applied Cryptography	3	15370	
15480	Security Testing Theory and Practice	3	15321	
15481	Electronic Crime for Law Enforcement	3	15233	
15482	System Auditing and Security Polices	3	15233	
15493	Special Topics in Cybersecurity (1)	3		
15494	Special Topic Cybersecurity (2)	3		
15495	Open Innovation for Cyber Security	3		