



Study Plan for Bachelor's Degree in Networks and Information Security Engineering for year 2023-2024

The Bachelor's Degree in Networks and Information Security Engineering awarded at Princess Sumaya University for Technology after the successful completion of 160 Credit Hours distributed as follows:-

University Requirements (27 CHs)

1. Compulsory Requirements (18 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
11100	Computer Skills (Remedial)	0		
31021	Arabic Language Communication Skills (Remedial)	0		
31022	English Language Communication Skills (Remedial)	0		
31112	Arabic Language Communication Skills	3	31021	
31122	English Language Communication Skills	3	31022	
31151	National Education	3		
31160	Leadership and Societal Responsibility	0		
31251	Military Science	3		
31254	Entrepreneurship and Innovation	3	Finish 60 Credit Hours	
31374	Life Skills	3	Finish 60 Credit Hours	

2. Elective Requirements (9 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
20251	History of Science	3		
31100	Sports and Health	3		
31130	Foreign languages	3		
31152	Arabic Islamic Civilization	3		
31211	Arabic Literature	3	31112	
31252	Governance and Development	3		
31260	Human Rights	3		
31261	Introduction to Politics and Economic Science	3		
31264	Introduction To Psychology	3		
31272	Development and Environment	3		
31311	Scientific Research Methods	3		
31351	Contemporary Issues in the Arab World	3		
31352	Jerusalem : History and Facts	3		
31362	Philosophy and Critical Thinking	3		

School Requirements (30 CHs)

1. Compulsory Requirements (30 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
11103	Structured Programming	3	11100	
11151	Structured Programming Lab	1		11103
20132	Calculus (1)	3		
20133	Calculus (2)	3	20132	



**Study Plan for Bachelor's Degree in
Networks and Information Security Engineering
for year 2023-2024**

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
20140	Basic Concepts in Chemistry	1		
20141	Physics (1)	3		
20142	Physics (2)	3	20141	
20150	Physics Lab	1		20142
20200	Technical Writing and Communication Skills	3	31112,31122	
20231	Calculus (3)	3	20133	
21218	Engineering Drawing Lab	1		
21219	Engineering Workshop	1		
24411	Engineering Ethics	1	Finish 99 Credit Hours	
27411	Engineering Economics	3	Finish 99 Credit Hours	

Program Requirements (103 CHs)

1. Compulsory Requirements (94 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
11206	Object Oriented Programming	3	11103	
11212	Data Structures and Introduction to Algorithms	3	11206,20134	
11253	Object Oriented Programming Lab	1		11206
11323	Database Systems	3	11212	
20134	Discrete Mathematics (1)	3		
20232	Engineering Mathematics(1)	3	20133	
20234	Linear Algebra	3		
20333	Numerical Analysis	3	20133	
20335	Applied Probability and Statistics	3	20231	
21221	Electric Circuits (1)	3	20142	
21222	Electric Circuits (2)	3	21221,22210	
21231	Electronics (1)	3	21221	
22210	Programming Applications Lab	1	11151	
22241	Digital Logic Design	3		
22348	Digital Logic Lab	1	22241	
22442	Embedded Systems	3	21231,22348	
22443	Computer Networks	3	22241	20335
22448	Embedded Systems Lab	1	22442	
22449	Computer Networks Lab	1	22443	
22460	Operating Systems and Security	3	11212,25330	
22462	Operating Systems Lab	1		22460
22560	Network Programming and Applications	3	22443,22460	
22570	Artificial Intelligence and Machine Learning	3	11212,20234,20335	
25330	Information Security Fundamentals	3	11206	
25347	Cryptography	3	20134,25330	
25420	Networks Security	3	25330	25441
25430	Digital Forensics & Incident Response	3	22460,25330	
25441	Wireless Networks	3	22443	
25445	Wireless Networks Lab	1	25441	



**Study Plan for Bachelor's Degree in
Networks and Information Security Engineering
for year 2023-2024**

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
25490	Practical Training	3	Finish 99 Credit Hours	
25520	Penetration Testing	3	25420	
25521	Defense Security Lab	1	25420	
25543	Intrusion Detection & Network Forensics	3	25420	
25545	Network Security Lab	1	25420	
25549	Ethical Hacking Techniques Lab	1		25543
25591	Senior Project (1)	1	Finish 120 Credit Hours	
25592	Senior Project (2)	2	25591	
27353	Signals and Systems	3	20232,21222	
27355	Communication Principles	3	27353	

2. Elective Requirements (9 CHs)

Course Number	Course Title	Credit Hours	Prerequisite	Concurrent
11466	Secure Software Development	3	22460	
11467	Database Security	3	11323,25330	
22530	Software Reverse Engineering	3	22442	
22571	Advanced Machine Learning	3	22570	
22582	Special Topics in Computer Engineering (1)	3		
22583	Special Topics in Computer Engineering (2)	3		
25530	Information Systems Security Assessment	3	25330	
25531	Information Security Management Systems	3	25420	
25541	Cloud Computing & Security	3	22443,25330	
25544	Privacy and Cyber Laws	3	25330	
25560	Cybersecurity Frameworks and Standards	3	25420	
25561	Cybersecurity Auditing	3	25420	
25576	Network Performance Analysis	3	20335,22443	
25582	Operation & Administration of Security Centers	3	22443,25330	
25583	IT Audit	3	22443,25330	
25584	Risk Management	3	20335,25330	
25586	Hardware Security	3	22442,25330	
25587	Secure System Architecture	3	25330	
25593	Special Topics in Network Security Engineering (1)	3		
25594	Special Topics in Network Security Engineering (2)	3		
25595	Special Topics in Information Security (1)	3		
25596	Special Topics in Information Security (2)	3		
27551	Wireless IoT	3	27355	
27582	Special Topics in Communications Engineering	3		