

## Guidance Plan for Cyber Security Department (2021/2022)

### First Year

<b>First Semester</b>		
Course Number	Course Name	Prerequisite
0120001	Remedial Computer Skills	---
0125130	Introduction to Information Technology	Remedial Computer Skills(Syn)
0101101	Calculus (1)	-----
0112110	Discrete Mathematics	-----
0420122	Communication Skills in English	Remedial English Language

<b>Second Semester</b>		
Course Number	Course Name	Prerequisite
0125131	Computer Networks (1)	Introduction to Information Technology
0125231	Principles of Cybersecurity	Introduction to Information Technology
0101140	Statistics and Probability	-----
0114150	Professional Skills for Scientific Faculties	Introduction to Information Technology
0420171	Life Skills	-----
0420115	Communication Skills in Arabic	Remedial Arabic Language

### Second Year

<b>First Semester</b>		
Course Number	Course Name	Prerequisite
0112120	Principles of Programming	Introduction to Information Technology
0125232	Data and Information Security	Principles of Cybersecurity
0215233	Infrastructure Security Using Linux	Computer Networks (1)
0125245	Computer Networks (2)	Computer Networks (1)
0420261	Entrepreneurship and Innovation	-----
0420151	National Education	-----

<b>Second Semester</b>		
Course Number	Course Name	Prerequisite
0125244	Cryptography	Principles of Cybersecurity
0112231	Digital Logic Design	Discrete Mathematics
0125347	Secure Communication Protocols	Computer Networks (2)
0112220	Object Oriented Programming	Principles of Programming
0420241	Leadership And Social	-----
----	University elective requirement	-----

### Third Year

<b>First Semester</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Prerequisite</b>
0125346	Data Integrity and Authentication	Cryptography
--	University elective requirement	--
0101221	Linear Algebra	Statistics and Probability
0142231	Principles of Artificial Intelligence	Principles of Cybersecurity
0125220	Internet Application Programming	Principles of Programming
0112333	Operating Systems	Computer Networks (2)

<b>Second Semester</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Prerequisite</b>
0125241	Database Security	Object Oriented Programming
--	Major elective requirement	--
0114324	Internet Application Development	Internet Application Programming
0125334	Software Security	Data Integrity and Authentication
0125435	Network Security	Secure Communication Protocols
1230125	Data Structure and Algorithms	Object Oriented Programming

### Fourth Year

<b>First Semester</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Prerequisite</b>
0125349	Digital Forensics	Software Security
-----	Major elective requirement	-----
0125323	Python for Cybersecurity	Object Oriented Programming
0101272	Numerical Analysis	Statistics and Probability
0125471	Methodology for Building A Secure System	Department Approval
0125481	Practical Training	Department Approval

<b>Second Semester</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Prerequisite</b>
0420101	Military Sciences	-----
0125248	Ethical Hacking in Cybersecurity	Secure Communication Protocols
----	Major elective requirement	-----
0125340	Data Analytics	Database and Security
0125472	Graduate Project	Methodology for Building A Secure System