جامعة اليمامة
Al Yamamah University

College of Engineering

Master in Cybersecurity (MCS)

Study Plan

MCS Foundation Courses

#	Course Code	Course Title	Credit
1	PRQ401	Comprehensive Cybersecurity - Foundations and Threats	3
2	PRQ402	Foundations of Computer Networking and Security	3
3	PRQ403	Operating Systems Concepts	3

* Students with no cybersecurity background may be asked to take one or more foundation courses.

MCS Core Courses

#	Course Code	Course Title	Credit	Pre-requisites
1	CYB511	Cybersecurity planning and management	3	
2	CYB512	Digital forensics and incident management	3	
3	CYB513	Information assurance architectures and standards	3	
4	CYB514	Penetration testing and ethical hacking	3	CYB513
5	CYB515	Vulnerability assessment	3	CYB512
6	CYB516	Advanced cryptography	3	6 credits
7	CYB530	Project - I	3	12 credits
8	CYB531	Project - II	3	CYB530

MCS Elective Courses

#	Course Code	Course Title	Credit	Pre-requisites
1	CYB520	Selected topics in cybersecurity	3	CYB516
2	CYB521	Software security	3	CYB513
3	CYB522	Cybersecurity policies and procedures	3	CYB513
4	CYB523	Cloud security	3	CYB516
5	CYB524	Security risk analysis	3	CYB511
6	CYB525	Cybersecurity Design Principles	3	CYB513

Year 1: First Semester

#	Course Code	Course Title	Credit	Pre-requisites
1	CYB511	Cybersecurity planning and management	3	PRQ401
2	CYB512	Digital forensics and incident management	3	PRQ403
3	CYB513	Information assurance architectures and standards	3	PRQ402

Year 1: Second Semester

#	Course Code	Course Title	Credit	Pre-requisites
1	CYB514	Penetration testing and ethical hacking	3	CYB513
2	CYB515	Vulnerability assessment	3	CYB512
3	CYB516	Advanced cryptography	3	06 credits

Year 2: Third Semester

#	Course Code	Course Title	Credit	Pre-requisites
1	CYB530	Project - I	3	12 credits
2		Elective 1	3	

Year 2: Fourth Semester

#	Course Code	Course Title	Credit	Pre-requisites
1	CYB531	Project - II	3	CYB530
2		Elective 2	3	