

Khwaja Fareed University of Engineering & Information Technology

Program: BS Cyber Security

Title: BS Cyber Security Fall-2025

Semester #: 1			
Course Code	Course Title	Credit Hours	Pre Req Course Code
ENSC-1113	The Science of Global Challenges	3	
QURN-1223	Understanding of Quran-I	1	
CSEC-1201	Cyber Security-Lab	1	
CSEC-1101	Cyber Security	2	
MATH-1106	Quantitative Reasoning-I	3	
COSC-1101	Programming Fundamentals	3	
COSC-1201	Programming Fundamentals-Lab	1	
COSC-1105	Introduction to ICT	2	
COSC-1205	Introduction to ICT-Lab	1	
ISLS-1112/ETIC-1112	Islamic Studies/ Ethics	2	
Credit Hours		19	
Semester #: 2			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-1102	Object Oriented Programming	3	
QURN-1224	Understanding of Quran-II	1	
PAKS-1121	Ideology and Constitution of Pakistan	2	
ELEN-2100	Digital Logic Design	2	
MATH-1107	Quantitative Reasoning-II	3	
ENGL-1118	Functional English	3	
SSCI-2126	Introduction to Psychology	2	
COSC-1202	Object Oriented Programming-Lab	1	
ELEN-2200	Digital Logic Design-Lab	1	
Credit Hours		18	
Semester #: 3			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-2101	Data Structures & Algorithms	3	
COSC-2204	Computer Networks-Lab	1	
COSC-2104	Computer Networks	2	
MATH-2103	Linear Algebra	3	
COSC-2201	Data Structures & Algorithms-Lab	1	
MSCI-2113	Introduction to Entrepreneurship	2	

SSCI-2131	Civics and Community Engagement	2	
COSC-2211	Information Security-Lab	1	
COSC-2111	Information Security	2	
Credit Hours		17	
Semester #: 4			
Course Code	Course Title	Credit Hours	Pre Req Course Code
ISLS-1140	Seerat of the Holy Prophet Muhammad (SAW)	0	
COSC-1104	Software Engineering	3	
COSC-2212	Artificial Intelligence-Lab	1	
COSC-2112	Artificial Intelligence	2	
COSC-2203	Database Systems-Lab	1	
CSEC-2201	Secure Software Design and Development-Lab	1	
COSC-2103	Database Systems	3	
INFT-4126	Professional Practices	2	
CSEC-2101	Secure Software Design and Development	2	
ENGL-2114	Expository Writing	3	
Credit Hours		18	
Semester #: 5			
Course Code	Course Title	Credit Hours	Pre Req Course Code
CSEC-3101	Network Security	2	
COSC-3115	Design & Analysis of Algorithms	3	
CSEC-3201	Network Security-Lab	1	
COSC-3218	Operating Systems-Lab	1	
COSC-3118	Operating Systems	2	
STAT-2104	Probability and Statistics	3	
COSC-2105	Theory of Automata	3	
CSEC-3203	Vulnerability Assessment & Reverse Engineering-Lab	1	
CSEC-3103	Vulnerability Assessment & Reverse Engineering	2	
Credit Hours		18	
Semester #: 6			
Course Code	Course Title	Credit Hours	Pre Req Course Code
MSCI-2116	Principles of Accounting	3	
CSEC-3206	Malware Analysis– Lab	1	
CSEC-3106	Malware Analysis	2	
CSEC-3205	Hardware Security-Lab	1	

CSEC-3105	Hardware Security	2	
CSEC-3204	Basic Electronics-Lab	1	
CSEC-3202	Information Assurance-Lab	1	
CSEC-3102	Information Assurance	2	
COSC-4215	Parallel & Distributed Computing-Lab	1	
COSC-4115	Parallel & Distributed Computing	2	
CSEC-3104	Basic Electronics	2	
Credit Hours		18	
Semester #: 7			
Course Code	Course Title	Credit Hours	Pre Req Course Code
MATH-2122	Differential Equations	3	
CSEC-4301	Final Year Project – I	2	
CSEC-4201	Digital Forensics-Lab	1	
CSEC-4101	Digital Forensics	2	
CSEC-4202	Wireless and Mobile Security-Lab	1	
CSEC-4102	Wireless and Mobile Security	2	
COSC-3217	Computer Organization & Assembly Language-Lab	1	
COSC-3117	Computer Organization & Assembly Language	2	
Credit Hours		14	
Semester #: 8			
Course Code	Course Title	Credit Hours	Pre Req Course Code
CSEC-4302	Final Year Project – II	4	
COSC-4113	HCI & Computer Graphics	2	
COSC-4213	HCI & Computer Graphics-Lab	1	
MATH-3116	Numerical Analysis	3	
CSEC-3401	Internship	3	
Credit Hours		13	

Total Credit Hours: 135