

Khwaja Fareed University of Engineering & Information Technology

Program: BS Computer Science

Title: BS Computer Science Fall-2023

Semester #: 1			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-1201	Programming Fundamentals-Lab	1	
COSC-1105	Introduction to ICT	2	
COSC-1205	Introduction to ICT-Lab	1	
MATH-1106	Quantitative Reasoning-I	3	
ISLS-1112/ETIC-1112	Islamic Studies/ Ethics	2	
COSC-1101	Programming Fundamentals	3	
QURN-1122	Fahm-e-Quran(Translation,Tafseer and Tajveed)	0	
PHYS-1121	Applied Physics	3	
Credit Hours		15	
Semester #: 2			
Course Code	Course Title	Credit Hours	Pre Req Course Code
SSCI-2126	Introduction to Psychology	2	
MATH-1120	Applied Mathematics	3	
MATH-1100	Calculus	3	
ENGL-1118	Functional English	3	
ELEN-2200	Digital Logic Design-Lab	1	
ELEN-2100	Digital Logic Design	2	
COSC-1202	Object Oriented Programming-Lab	1	
MATH-1107	Quantitative Reasoning-II	3	
COSC-1102	Object Oriented Programming	3	
Credit Hours		21	
Semester #: 3			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-2104	Computer Networks	2	
PAKS-1121	Ideology and Constitution of Pakistan	2	
COSC-2201	Data Structures & Algorithms-Lab	1	
ISLS-1140	Seerat of the Holy Prophet Muhammad (SAW)	0	
MSCI-2113	Introduction to Entrepreneurship	2	
ENGL-2114	Expository Writing	3	

COSC-2101	Data Structures & Algorithms	3	
COSC-2211	Information Security-Lab	1	
COSC-2111	Information Security	2	
MATH-2103	Linear Algebra	3	
COSC-2204	Computer Networks-Lab	1	
Credit Hours		20	
Semester #: 4			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-2103	Database Systems	3	
COSC-1104	Software Engineering	3	
COSC-2212	Artificial Intelligence-Lab	1	
COSC-2112	Artificial Intelligence	2	
COSC-2203	Database Systems-Lab	1	
STAT-2104	Probability and Statistics	3	
SSCI-2131	Civics and Community Engagement	2	
SSCI-2111	Professional Ethics	2	
Credit Hours		17	
Semester #: 5			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-3117	Computer Organization & Assembly Language	2	
COSC-3227	Advance Database Management Systems-Lab	1	
COSC-3127	Advance Database Management Systems	2	
COSC-3115	Design & Analysis of Algorithms	3	
COSC-3218	Operating Systems-Lab	1	
MSCI-2116	Principles of Accounting	3	
COSC-2105	Theory of Automata	3	
COSC-3217	Computer Organization & Assembly Language-Lab	1	
COSC-3118	Operating Systems	2	
Credit Hours		18	
Semester #: 6			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-3126	Advanced Programming	2	
MATH-2122	Differential Equations	3	
COSC-3226	Advanced Programming - Lab	1	
COSC-3225	Mobile Application Development - 1 Lab	1	
COSC-3224	Web Technologies-Lab	1	

COSC-3119	Computer Architecture	2	
COSC-3219	Computer Architecture-Lab	1	
COSC-3125	Mobile Application Development - 1	2	
COSC-3124	Web Technologies	2	
Credit Hours		15	
Semester #: 7			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-4303	Final Year Project - I	2	
COSC-4206	Computer Graphics - Lab	1	
COSC-4106	Computer Graphics	2	
COSC-4212	Cyber Security - Lab	1	
COSC-4112	Cyber Security	2	
COSC-4204	Mobile Application Development 2 - Lab	1	
COSC-4104	Mobile Application Development 2	2	
MATH-3116	Numerical Analysis	3	
COSC-4202	Compiler Construction-Lab	1	
COSC-4102	Compiler Construction	2	
Credit Hours		17	
Semester #: 8			
Course Code	Course Title	Credit Hours	Pre Req Course Code
COSC-4304	Final Year Project - II	4	
COSC-4113	HCI & Computer Graphics	2	
COSC-4213	HCI & Computer Graphics-Lab	1	
COSC-4114	Cloud Computing	2	
COSC-4214	Cloud Computing-Lab	1	
COSC-4115	Parallel & Distributed Computing	2	
COSC-4215	Parallel & Distributed Computing-Lab	1	
COSC-4401	Internship	3	
Credit Hours		16	

Total Credit Hours: 139