Faculty of Engineering and Computing

Study Plan for Bachelor of Information Technology

Academic Year 2023/2024

(133 Credit Hours)

University of Science & Technology

First: University Requirements (25 Credit Hours)

Course	Code	C.H	Pre-Requisites
Skills of Holy Quran Recitation and Tajweed	BUST01	1	-
English Language (1)	BUST02	4	-
Arabic Language	BUST03	4	-
Leadership Skills Development	BUST04	1	-
Islamic Culture	BUST05	4	-
English Language (2)	BUST06	4	BUST02
Communication Skills	BUST07	1	-
Critical Thinking	BUST08	1	-
Computer Skills	BUST09	3	-
Research Methodology	BUST10	2	-

Second: Faculty Requirements (39 Credit Hours)

Course	Code	C.H	Pre-Requisites
Mathematics	CIT01	3	-
Calculus	CIT02	3	CIT01
Probability and Statistics	CIT03	3	CIT02
Computing Fundamentals	CIT04	3	-
Problem Solving and Programming	CIT05	3	CIT04
Computer Programming	CIT06	3	CIT05
Data Structures and Algorithms	CIT07	3	CIT06
Introduction to Web Design	CIT08	3	CIT04
Introduction to Database	CIT09	3	CIT05
Object Oriented Programming	CIT10	3	CIT06
Principles of Operating Systems	CIT11	3	CIT07
Graduation Project	CIT12	6	BUST10 and 70% of the Total C.H.
Industrial Training	CIT13	-	-

Third: Program Requirements
A. Program Compulsory Requirements (60 Credit Hours)

Course	Code	C.H	Pre-Requisites
Fundamentals of Information Technology	IT121	3	-
Information Technology Management	IT221	3	IT121
Discrete Structures	CS212	3	CIT02
Database Systems Design	CS221	3	CIT09
Principles of Data Communication and Networks	CS223	3	CIT06
System Analysis and Design	IS223	3	CIT09, IT121
WEB Applications Development	IT311	3	CIT08, CIT09
Human Computer Interaction and Visual Programming	IT312	3	IS223

Cont. Program Compulsory Requirements

Course	Code	C.H	Pre-Requisites
Advanced IT	IT313	3	IT221
Systems Integration and Administration	IT321	3	CIT11
Information Systems Development	IS321	3	CS221, IS223
Digital Multimedia	IT322	3	IT121
Database Administration	IT324	3	CS221
Software Engineering	CS325	3	IS223
Systems and Networks Security	IT412	3	CS223
Decision Support Systems	MIS005	3	IT321
Enterprise Resources Planning	IT422	3	CS221, CIT10
Principles of Artificial Intelligence	CS321	3	CIT07, CS212
Project Management	IS412	3	IS223
Advanced Applications Programming	IT431	3	IT312

B. Program Elective Requirements (9 Credit Hours)

Course	Code	C.H	Pre-Requisites
Network Management	ITE01	3	IT321, IT412
Database Security and Disaster Recovery	ITE02	3	CS221, IT412
Selected Topics in IT	ITE03	3	IT313
Ethics of ICT	ITE04	3	IT311, IT412
E-Business Applications Development	ITE05	3	IT311, IT312
Distributed Systems	ITE06	3	CS223
Advanced Artificial Intelligence	ITE07	3	IT321
Knowledge Based Systems	ITE08	3	IT321
Advanced Software Engineering	ITE09	3	CS325
Software Quality Assurance	ITE10	3	CS325
Advanced Operating Systems	ITE11	3	CIT11, CS223
Networks Applications and Services	ITE12	3	CS223, IT321
Advanced Database Applications	ITE13	3	CS221
Data Mining and Knowledge Discovery	ITE14	3	CS221