The Sufi Institute
Bachelor of Science in Information Technology (BSIT)
Course Scheme

Semester 1

Code	Course Title	Domain	Cr Hr.
IT101	Programming Fundamentals	Core	4 (3-1)
GE101	Application of Information & Communication Technologies	GER	3 (2-1)
GE102	Functional English	GER	3 (3-0)
GE103	Ideology and Constitution of Pakistan	GER	2 (2-0)
GE104	Discrete Structures	GER	3 (3-0)
DC101	Mathematical Foundation-I (for Medical Students)	Deficiency NC	NC
	Total Credit Hours		15 (13-2)

Semester 2

Code	Course Title	Domain	Cr Hr.
IT102	Object Oriented Programming	Core	4 (3-1)
GE105	Pakistan Studies	GER	2 (2-0)
IT104	Digital Logic Design	Core	3 (2-1)
GE106	Islamic Studies	GER	2 (2-0)
IT103	Data Structures	Core	4 (3-1)
SS101	Supporting Elective I	Elective	2 (2-0)
DC102	Mathematic Foundation-II (for Medical Students)	Deficiency NC	NC
	Total Credit Hours		17 (14-3)

Semester 3

Code	Course Title	Domain	Cr Hr.
IT201	Database Systems	Core	4 (3-1)
IT202	Computer Networks	Core	3 (2-1)
GE201	Calculus and Analytic Geometry	GER	3 (3-0)
GE202	Expository Writing	GER	3 (3-0)
MT201	Multivariable Calculus	Math	3 (3-0)
SS201	Supporting Elective II	Elective	2 (2-0)

	Total Credit Hours		18 (16-2)

Semester 4

Code	Course Title	Domain	Cr Hr.
IT203	Computer Organization & Assembly Language	Core	3 (2-1)
IT204	Operating Systems	Core	3 (2-1)
IT205	Artificial Intelligence	Core	3 (2-1)
IT206	Domain Elective I	Domain Elective	3 (3-0)
IT207	Software Engineering	Core	3 (3-0)
MT202	Linear Algebra	Math	3 (3-0)
	Total Credit Hours		18 (15-3)

Semester 5

Code	Course Title	Domain	Cr Hr.
IT301	Information Security	Core	3 (2-1)
IT302	Domain Elective II	Domain Elective	3 (2-1)
IT303	DB Administration & Management	Domain Core	3 (2-1)
IT304	Web Technologies	Domain Core	3 (2-1)
IT305	Domain Elective III	Domain Elective	3 (2-1)
MT301	Probability & Statistics	Math	3 (3-0)
	Total Credit Hours		18 (13-5)

Semester 6

Code	Course Title	Domain	Cr Hr.
IT306	Information Technology Infrastructure	Domain Core	3 (2-1)
IT307	Parallel & Distributed Computing	Domain Core	3 (2-1)
IT308	Cyber Security	Domain Core	3 (2-1)
IT309	System & Network Administration	Domain Core	3 (2-1)
EW301	Technical & Business Writing	EW	3 (3-0)
SS301	Supporting Elective III	Elective	2 (2-0)
	Total Credit Hours		17 (13-4)

Semester 7

Code	Course Title	Domain	Cr Hr.
IT401	Final Year Project – I	Core	3 (0-3)

IT402	Analysis of Algorithms	Core	3 (3-0)
IT403	Domain Elective IV	Domain Elective	3 (2-1)
GE401	Entrepreneurship	GER	2 (2-0)
GE402	Civics and Community Engagement	GER	2 (2-0)
GE403	Applied Physics	GER	3 (2-1)
	Total Credit Hours		16 (11-5)

Semester 8

Code	Course Title	Domain	Cr Hr.
IT404	Final Year Project – II	Core	3 (0-3)
IT409	Domain Elective V	Domain Elective	4 (3-1)
IT408	Domain Elective VI	Domain Elective	3 (2-1)
IT407	Domain Elective VII	Domain Elective	3 (2-1)
GE404	Professional Practices	GER	2 (2-0)
	Total Credit Hours		15 (9-6)

BSIT Degree Summary

Course Type	No. of Courses	Total Credit Hours
Computing Core	14	46
Domain Core	6	18
Domain Elective	7	22
Mathematics Supporting	4	12
Supporting Electives	3	6
General Education (GER)	12	30
Total	46	134