

**Scheme of Study for Bachelor of Science in  
Information Technology BS (IT)  
4-year Programme (8 Semesters) (2011-2015)**

**Semester I: (19 credit hours)**

#	Course code	Course Title	Category	Credit Hours	Prerequisites
1	IT 101	Introduction to Information and Comm. Technologies	Computing General Education	2+1	-
2	CS 103	Programming Fundamentals	Computing core course	3+1	-
3	MT 105	Calculus and Analytical Geometry	Computing Supporting course	3+0	-
4	EE 107	Basic Electronics	Computing Supporting course	2+1	-
5	EG 109	English Composition & Comprehension	Computing General Education	3+0	-
6	* 111	University Elective I	University Electives	3+0	-

**Semester II: (17 credit hours)**

#	Course code	Course Title	Category	Credit Hours	Prerequisites
1	CS 102	Discrete Structures	Computing core course	3+0	-
2	CS 104	Object Oriented Programming	Computing core course	2+1	Programming Fundamentals
3	IT 106	Fundamentals of IT	IT core course	3+0	-
4	* 108	University Elective II	University Electives	3+0	-
5	EG 110	Communication Skills	Computing General Education	3+0	-
6	PK 112	Pakistan Studies	Computing General Education	2+0	-

**Semester III: (17 credit hours)**

#	Course code	Course Title	Category	Credit Hours	Prerequisites
1	CS 201	Digital Logic Design	Computing core course	2+1	Discrete Structures
2	CS 203	Data Structures and Algorithms	Computing core course	2+1	Object Oriented Paradigm
3	MT 205	Linear Algebra	Computing Supporting course	3+0	-
4	EG 207	Technical and Business Writing	Computing General Education	3+0	-
5	PK 209	Islamic Studies/Ethics	Computing General Education	2+0	-
6	* 211	University Elective III	University Electives	3+0	-

**Semester IV: (18 credit hours)**

#	Course code	Course Title	Category	Credit Hours	Prerequisites
1	CS 202	Operating Systems	Computing core course	2+1	Data Structures and Algorithms
2	CS 204	Introduction to Database Systems	Computing core course	2+1	Data Structures and Algorithms
3	IT 206	Organizational Behaviour	IT supporting course	3+0	-
4	MT 208	Probability and Statistics	Computing supporting course	3+0	-
5	CS 210	Computer Communication and Networks	Computing core course	2+1	Operating Systems
6	* 212	University Elective IV	University Electives	3+0	-

**Semester V: (18 credit hours)**

#	Course code	Course Title	Category	Credit Hours	Prerequisites
1	IT 301	Web Systems and Technologies	IT core course	2+1	Fundamentals of IT
2	* 303	University Elective V	Computing core course	3+0	-
3	CS 305	Introduction to Software Development	Computing core course	3+0	Data Structures and Algorithms
4	* 307	IT Elective I	IT Electives	3+0	-
5	IT 309	Multimedia Systems and Design	IT core course	2+1	Fundamentals of IT
6	IT 311	Information Systems	IT supporting course	3+0	-

**Semester VI: (18 credit hours)**

#	Course code	Course Title	Category	Credit Hours	Prerequisites
1	* 302	University Elective VI	University Electives	3+0	-
2	IT 304	Systems and Network Administration	IT core course	2+1	-
3	* 306	IT Elective II	IT Electives	3+0	-
4	* 308	University Elective VII	University Electives	3+0	-
5	* 310	IT Elective –III	IT Electives	3+0	-
6	CS 312	Human Computer Interaction	Computing core course	2+1	-

**Semester VII: (18 credit hours)**

#	Course code	Course Title	Category	Credit Hours	Prerequisites
1	IT401	Technology Management	IT supporting course	3+0	-
2	* 403	IT Elective IV	IT Electives	3+0	-
3	IT 405	Network Security	IT core course	3+0	-

4	IT 407	System Integration and Architecture	IT core course	3+0	Fundamentals of IT
5	* 409	IT Elective V	IT Electives	3+0	-
6	*411	IT Elective VI	IT Elective	3+0	-

**Semester VIII: (12 credit hours)**

#	<i>Course code</i>	<i>Course Title</i>	<i>Category</i>	<i>Credit Hours</i>	<i>Prerequisites</i>
1	CS 402	IT Capstone /Software Project	Computing core course	6	-
2	* 404	IT Elective VII	IT Elective	3	-
3	SS 406	Professional Practices	Computing General education	3	-