

**BS (IT) Road Map Batch 12**  
**Total number of Courses 42**  
**Total 135 Credit Hrs.**

**Semester 1**

**Semester 2**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-req</b>	<b>Cr. Hrs.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>Pre-req</b>	<b>Cr. Hrs.</b>
CC1011w	Introduction to Computing		4 (3+1)	CC1111w	Programming Fundamentals	CC1011w (ITC)	4 (3+1)
CC1311w	Discrete Structures		3		Basic Electronics		4(3+1)
	Calculus and Analytical Geometry		3		Linear Algebra		3
	Functional English (English-I)		3		Communication Skills (English-II)	Eng-I	3
	Islamic Studies		3		Pakistan Studies		3
	<b>Semester Total</b>		<b>16</b>		<b>Semester Total</b>		<b>17</b>

**Semester 3**

**Semester 4**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-req</b>	<b>Cr. Hrs.</b>	<b>Course Code</b>	<b>Course Title</b>	<b>Pre-req</b>	<b>Cr. Hrs.</b>
CC2111w	Object Oriented Programming	CC1111w(PF)	4 (3+1)	CC2711w	Software Engineering	CC2111w (OOP)	3
CC2211w	Digital Logic Design	PH121 (BE)	4(3+1)		Uni. Elective I		3
	Probability and Statistics		3	IT2751w	Multimedia Systems and Design		3 (2+1)
	Technical English and Report Writing (English-III)	Eng-II	3	CC2411w	Data Structures and Algorithms	CC2111w(OOP)	4(3+1)
IT2731w	Technology Management	CC1011w (ITC)	3	CC2421w	Introduction to Database Systems	CC1311w (DS)	4 (3+1)
				IT2031w	Information Systems		3
	<b>Semester Total</b>		<b>17</b>		<b>Semester Total</b>		<b>20</b>

Semester 5				Semester 6			
Course Code	Course Title	Pre-req	Cr. Hrs.	Course Code	Course Title	Pre-req	Cr. Hrs.
IT3721w	OO Analysis & Design	CC1111w (OOP), CC2711w (SE).	3	IT3421w	DB Administration & Management	CC2411w (DSA)	3
CC3021w	Operating Systems	CC2411w (DSA)	4 (3+1)	IT3631w	Systems and Network Administration	CC3021w (OS)	3
IT3051w	System Integration and Architecture	IT2031w (IS)	3	IT2621w	Internet Architecture & Protocols	CC3611w (CCN)	3
CC3611w	Computer and Communication Networks	CC2211w (DLD)	4 (3+1)	IT3741w	IT Project Management	CC2711w (SE), IT2731w (TM)	3
	Uni. Elective II (Organizational Behavior)		3		IT Elective-I (IT Infrastructure)		3
					IT Elective-II		3
	<b>Semester Total</b>		<b>17</b>		<b>Semester Total</b>		<b>18</b>

Semester 7				Semester 8			
Course Code	Course Title	Pre-req	Cr. Hrs.	Course Code	Course Title	Pre-req	Cr. Hrs.
CC4981	Capstone Project Part I		3	CC4991	Capstone Project Part II	CC4981(C P 1)	3
IT4641w	Data and Network Security	CC2411w (DSA), CC3611w (CCN)	3	IT4651w	Cloud Computing		3
CC3041w	Human Computer Interaction	CC2711w (SE)	3		IT Elective IV		3
IT3121w	Web Systems and Technologies	IT2621w (I AP)	3		IT Elective V		3
	IT Elective III		3		IT Elective VI		3
	<b>Semester Total</b>		<b>15</b>		<b>Semester Total</b>		<b>15</b>

COD Informatics \_\_\_\_\_  
Dr. Sajid Mahmood

Dean SST \_\_\_\_\_  
Dr. Shaukat Iqbal