## **BS Mathematics**

Semester I		Credit Hrs.	
		Theory	Lab
Gen Ed/Culture	Islamiat / Ethics	2	
Gen Ed/Language	Functional English	2	
Non-Disp/CS	Introduction to Programming Software/Computing	1	1
Math	Calculus and Analytic Geometry	3	
Gen Ed/Nat Sc	History/Foundation of Mathematics	3	
Non-Disp/Physics	Physics-I (Basic Mechanics)	2	1
Qur'an	Qur'an Translation I (Imaniaat)	1	
	Total	14	2

Semester II		Credit Hrs.		
			Theory	Labs
Gen Ed/Culture	Pakistan Studies		2	
Gen Ed/Language	Technical Report Writing		2	
Non-Disp/Physics	Physics –II (Electricity and Magnatism)		2	1
Math	Linear Algebra – I		3	
Math	Vectors and Tensor Analysis		3	
Gen Ed/ Nat Sc.	General Chemistry I		2	1
	To	tal	14	2

Semester III		Credit Hrs.	
		Theory	Labs
Gen Ed/Language	Communication and Presentation Skills	2	
Non-Disp/Physics	Physics –III/ Modern Physics	2	1
Non-Disp/Statistics	Descriptive Statistics	3	
Math	Multivariable Calculus	3	
Gen edu	Quantititive Reasoning - I	2	1
Math	Infinite Series	3	
Qur'an	Qur'an Translation I (Ibadaat)	1	
	Total	16	2

Semester IV		Credit Hrs.	
		Theory	Lab
Math	Waves and Oscillations	3	
Math	Complex Analysis	3	
Math	Discrete Mathematics	3	
Non-Disp/Statistics	Inferential Statistics	3	
Math	Number Theory	3	
Gen Ed/SOC	Social Psychology	3	
	Total	18	

Semester V		Credit Hrs.	
		Theory	Labs
Math	Real Analysis-I	3	
Math	Numerical Methods with Programming	2	1
Math	Group Theory – I	3	
Math	Metrics and Topology	3	
Gen Ed/SOC	Professional Ethics	2	
Qur'an	Qur'an Translation I (Mua'amlaat)	1	
	Total	14	1

Semester VI		Credit Hrs.		
			Theory	Labs
Math	Mathematical Methods of Physics-I		3	
Math	Differential Geometry		3	
Math	Introductory Functional Analysis		3	
Math	Abstract Algebra – I		3	
Math	Operations Research/Math programming and Optimization		2	1
Gen Ed/MGT	Project Management		3	
		Total	17	1

Semester VII		Credit Hrs.	
		Theory	Lab
Gen EdMGT	Leadership and Enterprenuarship	3	
Math	Distribution Course –I	3	
Math	Distribution Course – II	3	
Math	Distribution Course – II	3	
Math	FYP – I	3	
Qur'an	Qur'an Translation I (Ikhlaqiaat)	1	
	Total	16	

Semester VIII		Credit Hrs.	
		Theory	Labs
Math	Introduction Mathematical Modeling	3	
Math	Distribution Course –IV	3	
Math	Distribution Course –V	3	
Math	Distribution Course –VI	3	
Math	FYP-II	3	
	Total	15	
	Program Total Credit Hours (132)	124	8