Semester Breakup

Semester-I

Sr. No.	Course Code	Course Title	Credit Hours
1	ENGL1114	Functional English	3(3+0)
2	ISLA1111/ HUMN1111	Islamic Studies/Ethics*	2(2+0)
3	EDUC3111	Foundations of Education	3(3+0)
4	COMP1111	Introduction to Information Technology	3(3+0)
5	PHYS1111	Mechanics-I	4(3+1)
6	MATH1111	Calculus-I	3(3+0)
		Total	**18**

*For non-Muslim Students only

Semester-II

Sr. No.	Course Code	Course Title	Credit Hours
1	ENGL1119	Communication Skills	3(3+0)
2	PAKS1111	Pakistan Studies	2(2+0)
3	EDUC1112	General Methods of Teaching	3(3+0)
4	COMP1113	Computing Tools for Mathematics	3(2+1)
5	PHYS1114	Mechanics-II	4(3+1)
6	MATH1112	Calculus-II	3(3+0)
		Total	**18**

Six Credit Hours (**Non-credited**) **Teaching Practice** is mandatory to fulfill degree requirement. It will comprise of 3 weeks and it will be conducted twice i.e. before start of 3rd and 5th semester. It will have 3 credit hours (each time) for teaching / evaluation purpose; however, it will be reflected as non-credited course on the Transcript.

Semester-III

Sr. No.	Course Code	Course Title	Credit Hours
1	ENGL2115	Technical Writing and Presentation Skills	3(3+0)
2	EDUC3143	Educational Assessment	3(3+0)
3	PHYS2111	Electricity and Magnetism-I	4(3+1)
4	MATH2111	Calculus-III	3(3+0)
5	MATH2116	Analytic Geometry	3(3+0)
6	MATH2112	Elementary Set Theory	3(3+0)
7	EDUC2127	Short Term Teaching Practice-I	Non Credit Course
		Total	**19**

Semester-IV

Sr. No.	Course Code	Course Title	Credit Hours
1	PHYS2114	Modern Physics and Electronics	4(3+1)
2	EDUC2118	Curriculum Design and Instruction	3(3+0)
3	STAT2111	Introduction to Statistics and Probability	3(3+0)
4	MATH2113	Discrete Mathematics	3(3+0)
5	MATH2117	Ordinary Differential Equations	3(3+0)
6	MATH2114	Elementary Linear Algebra	3(3+0)
		Total	**19**

Six Credit Hours (**Non-credited**) **Teaching Practice** is mandatory to fulfill degree requirement. It will comprise of 3 weeks and it will be conducted twice i.e. before start of 3rd and 5th semester. It will have 3 credit hours (each time) for teaching / evaluation purpose; however, it will be reflected as non-credited course on the Transcript.

Semester-V

Sr. No.	Course Code	Course Title	Credit Hours
1	MATH3111	Real Analysis-I	3(3+0)
2	MATH3112	Group Theory-I	3(3+0)
3	MATH3113	Complex Analysis	3(3+0)
4	MATH3114	Linear Algebra	3(3+0)
5	MATH3115	Vector and Tensor Analysis	3(3+0)
6	COMP1112	Programming Fundamentals	4(3+1)
7	EDUC3160	Short Term Teaching Practice-II	Non Credit Course
		Total	**19**

Semester-VI

Sr. No.	Course Code	Course Title	Credit Hours
1	MATH3117	Real Analysis-II	3(3+0)
2	MATH3118	Number Theory	3(3+0)
3	MATH3119	Introduction to Topology	3(3+0)
4	MATH3120	Mathematical Statistics	3(3+0)
5	PHYS3112	Classical Mechanics	3(3+0)
		Total	**15**

Semester-VII

Sr. No.	Course Code	Course Title	Credit Hours
1	MATH4111	Functional Analysis	3(3+0)
2	MATH4112	Numerical Analysis-I	3(3+0)
3	MATH4113	Rings and Modules	3(3+0)
4	MATHXXXX	Elective-I (From List of Elective Courses)	3(3+0)
5	PHYS3111	Mathematical Methods of Physics-I	3(3+0)
6	MATH4115	Guests/Students Seminar-I	1(1+0)
		Total	**16**

Semester- VIII

Sr. No.	Course Code	Course Title	Credit Hours
1	MATH4117	Differential Geometry	3(3+0)
2	MATH4118	Numerical Analysis-II	3(3+0)
3	MATHXXXX	Elective-II(From List of Elective Courses)	3(3+0)
4	MATHXXXX	Elective-III (From List of Elective Courses)[¥]	3(3+0)
5	MATHXXXX	Elective-IV(From List of Elective Courses)	3(3+0)
	MATH4114	Thesis*	6(6+0)
	MATH4119	Research Project**	3(3+0)
6	MATH4120	Guests/Students Seminar-II	1(1+0)
		Total	**16**

[¥]The students who opt thesis will not opt/take Elective III course.

* The Thesis / Research Project will start in 7th Semester but the evaluation of thesis will be carried out at the end of 8th Semester after viva-voce of students.

**Students opting research project in semester-VIII should have studied one special paper of 3 credit hours in semester-VIII.