

0256 BS in Mathematics

Shift : Morning

Duration : 4 years, 8 semesters, 130 credit hours

Eligibility : Intermediate or equivalent qualification with at least 50% marks from any recognized Board

1st Semester

Course	Course Title	Credit Hours
CSC-101	Introduction to Computing	2
CSC-101(L)	Introduction to Computing	1
ENG-112	English Grammar	3
HUM-101	Islamic Studies	3
MTS-101	Calculus-I	3
PHY-104	Introductory Mechanics	3

2nd Semester

Course	Course Title	Credit Hours
CSC-103	Introduction to Programming	2
CSC-103(L)	Introduction to Programming	1
HUM-102	Pakistan Studies	3
MTS-201	Calculus-II	3
MTS-124	Discrete Mathematics	3
PHY-105	Introductory Electricity & Magnetism	3
ENG-101	Communications Skills	3

3rd Semester

Course	Course Title	Credit Hours
ACC-201	Fundamentals of Accounting	3
CSC-216	Data Structures & Algorithm	2
CSC-216(L)	Data Structures & Algorithm	1
MTS-217	Calculus - III	3
MTS-218	Vector and Tensor Analysis	3
MTS-219	Number Theory	3
PHY-201	Classical Mechanics	3

4th Semester

Course	Course Title	Credit Hours
HUM-103	Sociology	3
MTS-221	Group Theory-I	3
MTS-212	Ordinary Differential Equations	3
MTS-408	Mathematical Statistics-I	3
PHY-202	Quantum Mechanics	3

5th Semester

Course	Course Title	Credit Hours
MTS-309	Group Theory-II	3
MTS-310	Partial Differential Equations	3
MTS-413	Mathematical Statistics-II	3
MTS-401	Real Analysis-I	3
MTS-404	Topology-I	3
MTS-403	Complex Analysis-I	3

6th Semester

Course	Course Title	Credit Hours
MTS-301	Linear Algebra	3
MTS-405	Real Analysis-II	3
MTS-422	Topology-II	3
MTS-407	Complex Analysis-II	3
MTS-409	Numerical Analysis-I	3

7th Semester

Course	Course Title	Credit Hours
MTS-412	Numerical Analysis-II	3
MTS-xxx	Mathematical Modeling	3
MTS-xxx	Differential Geometry	3
MTS-xxx	Elective-I	3
MTS-xxx	Seminar	3
MTS-499	Research Project	3

8th Semester

Course	Course Title	Credit Hours
MTS-xxx	Integral Equations	3
MTS-xxx	Elective-II	3
MTS-xxx	Elective-III	3
MTS-xxx	Elective-IV	3
MTS-499	Research Project	3