

## 0222 Master of Science in Mathematics

Shift : Afternoon

Duration : 2 years, 4 semesters, 72 credit hours

Eligibility : B.Sc with Mathematics or equivalent qualification with at least 45% marks from any HEC recognized University

### 1st Semester

Course	Course Title	Credit Hours
MTS-402	Group Theory	3
MTS-403	Complex Analysis-I	3
MTS-404	Topology-I	3
MTS-419	Advanced Calculus	3
MTS-4xx	Mathematical Tools	3
MTS-513	Linear Algebra	3

### 3rd Semester

Course	Course Title	Credit Hours
MTS-409	Numerical Analysis-I	3
MTS-413	Mathematical Statistics-II	3
MTS-503	Functional Analysis-I	3
MTS-506	Partial Differential Equations	3
MTS-517	Rings and Fields	3

### 2nd Semester

Course	Course Title	Credit Hours
MTS-407	Complex Analysis-II	3
MTS-408	Mathematical Statistics-I	3
MTS-411	Number Theory	3
MTS-421	Real Analysis	3
MTS-505	Topology-II	3
MTS-512	Ordinary Differential Equations	3

### 4th Semester

Course	Course Title	Credit Hours
MTS-412	Numerical Analysis-II	3
MTS-507	Functional Analysis-II	3
MTS-515	Measure Theory/Vector & Tensor Analysis	3
MTS-516	Dynamics	3
MTS-514	Differential Geometry/ Mathematical Modeling	3
MTS-599	Master Project	6