# BS (4 Years)
## Mathematics

## Admission Criteria

- **At least 45% marks in Intermediate in aggregate.**
  **Eligibility Criteria for Msc:**
  **BSc with at least 45% marks**

## Scheme of Studies BS Mathematics

| Foundation Courses | | |
|---|---|---|
| **S No.** | **Title** | **Credit Hours** |
| 1 | Calculus I | 3 |
| 2 | Calculus II | 3 |
| 3 | Calculus III | 3 |
| 4 | Algebra I | 3 |
| 5 | Algebra II | 3 |
| 6 | Complex Analysis | 3 |
| 7 | Ordinary Differential Equations | 3 |
| 8 | Affine and Euclidean Geometry | 3 |
| 9 | Linear Algebra | 3 |

| Major Courses | | |
| --- | --- | --- |
| S No. | Title | Credit Hours |
| 1 | Number Theory | 3 |
| 2 | Topology-I | 3 |
| 3 | Topology-II | 3 |
| 4 | Numerical Analysis-I | 3 |
| 5 | Numerical Analysis-II | 3 |
| 6 | Mathematical Methods | 3 |
| 7 | Functional Analysis-I | 3 |
| 8 | Functional Analysis-II | 3 |
| 9 | Partial Differential Equations | 3 |
| 10 | Complex Analysis-I | 3 |
| 11 | Complex Analysis-II | 3 |
| 12 | Real Analysis-I | 3 |
| 13 | Real Analysis-II | 3 |
| 14 | Differential Geometry | 3 |
| 15 | Graph Theory | 3 |

| | Electives + Project | |
|---|---|---|
| **S No.** | **Title** | **Credit Hours** |
| 1 | Measure Theory-I | 3 |
| 2 | Measure Theory-II | 3 |
| 3 | Advanced Group Theory-I | 3 |
| 4 | Advanced Group Theory-II | 3 |
| 5 | Optimization Theory | 3 |
| 6 | Convex Analysis Project | 3+3 |