

# **Department of Mathematics, Bioinformatics & Computer Applications**

## **Mathematics**

### **Probability & Statistics**

Probability, Standard discrete and continuous univariate distributions, Stochastic Processes, Theory of Estimation, Testing of Hypothesis, Non-parametric Statistics, Multivariate Analysis, Regression Analysis.

### **Computational Mathematics**

Ordinary and Partial Differential Equations, Numerical Analysis, Optimization Techniques, Abstract and Linear Algebra, Real Analysis, Topology and Functional Analysis.

### **Theoretical Computer Science**

Discrete Mathematics, Optimization Techniques, Linear Algebra, Functional Analysis, Data Structures and Algorithms, Theory of Computation and Compilers, Computational Number Theory and Cryptography.

### **Data Science**

Statistics, Discrete Mathematics, Optimization Techniques, Linear Algebra, Artificial Intelligence, Machine Learning, Deep Learning, Data Structures and Algorithms, Database Management System.

