



Amity Institute of Applied Sciences

DEPARTMENT OF Mathematics

Research/Interest Areas

1. **Pure Mathematics**
 - Complex Analysis
 - Functional Analysis
 - Operator Theory
 - Approximation Theory
 - Special Functions and Fractional Calculus
 - Integral Transforms
2. **Applied Mathematics**
 - Partial Differential Equations
 - Mathematical Biology
 - Biomathematics
 - Fluid Mechanics
 - Relativity
 - Reliability
3. **Computational Mathematics**
 - Numerical Analysis
 - Computational Mathematics
 - Differential Equations
 - Neural Networks
 - Nature-inspired Algorithms
4. **Optimization & Decision Sciences**
 - Operations Research
 - Mathematical Programming
 - Multi-objective Programming
 - Transportation Problems
 - Inventory Management
 - Supply Chain Management
 - Decision Science
 - Multi-Criteria Decision Making
 - Optimal Control
5. **Soft Computing & Intelligent Systems**
 - Fuzzy Set Theory
 - Rough Set Theory
 - Soft Set Theory
 - Near Set Theory
 - Fuzzy Topology
 - Intuitionistic Fuzzy Topology
 - Fuzzy Soft Sets
 - Hesitant Fuzzy Sets