

MSC IN MATHEMATICS

WITH APPLICATIONS IN COMPUTER SCIENCE

OBJECTIVES OF THE PROGRAMME

- To emphasise the relevance and usefulness of Mathematics from the point to view of applications
- To equip the learners with core mathematical knowledge and training that is useful in application areas and for higher studies in Mathematics
- To develop a workforce that is equipped with the mathematical skills necessary in the changing industrial and economic scenario of the country
- To develop a work force in the emerging disciplines such as Mathematical Biology, Computational Mathematics etc
- To promote collaborative research with the Industry and other agencies

SALIENT FEATURES

- Worth 64 credits divided over four semesters
- Sound Mathematics background through courses tailored for applications
- Practical sessions for training in implementation of computer algorithms

ADMISSION PROCEDURE

- Twice a year in June and July
- Admission is online through the portal https://ignouadmission.samarth.edu.in/
- Fee of Rs. 6900/- (subject to change) to be paid while applying online

ELIGIBILITY

 B.Sc/BA Major/Honours degree holders in Mathematics

(or)

 B.Sc/BA degree holders who have studied three subjects with Mathematics as one of the subjects and with equal weightage

IGNOU Regional Centre Kochi Ranchi Sacred Heart College College Thevara Study Centres Chennai Rani Durgavati College University **IGNOU** Maharaia Regional Agrasen College Centre

Semester 1

- 1. Programming and Data Structures
- 2. Linear Algebra
- 3. Real Analysis
- 4. Complex Analysis
- 5. Differential Equations and Numerical Solutions

Semester 2

- 1. Algebra
- 2. Functional Analysis
- 3. Probability and Statistics

Semester 3

- 1. Mathematical Modelling
- 2. Graph Theory
- 3. Design and Analysis of Algorithms
- 4. Image Processing and Pattern Recognition
- 5. Computer Graphics

Semester 4

- 1. Coding Theory
- 2. Cryptography
- 3. Soft Computing
- 4. Project

