

# Discipline of Mathematics, IIT Indore

## Admission for Ph.D. Programme

<http://math.iiti.ac.in/>



### About Discipline of Mathematics, IIT Indore

Indian Institute of Technology Indore (IIT Indore), located in Madhya Pradesh, is an institute of national importance established by the Government of India in 2009. The Discipline of Mathematics of IIT Indore started functioning in July 2009, introduced its Ph.D. programme in 2010 and M.Sc. programme in 2015. The present faculty members of the Discipline are well equipped to conduct research programme in the following areas of pure and applied Mathematics: Algebra, Harmonic Analysis, Hyperbolic-type Metrics, Quasiconformal Mappings, Univalent Function Theory, Numerical Functional Analysis, Differential Equations, Numerical Linear Algebra, Stability Analysis for Stochastic Differential Equations, Rough Set Theory, Modal Logics, Wavelet Analysis, Information Theory and its applications to Probability and Statistics, Information Geometry, and Machine Learning. As the institute is rapidly growing, other areas of mathematics research will also soon make their presence at IIT Indore.

### Research Groups

#### Analysis:

Faculty	Research Area
Dr. Swadesh Kumar Sahoo	Geometric Function Theory
Dr. V. Antony Vijesh	Numerical Functional Analysis
Dr. Niraj Kumar Shukla	Frame and Wavelet Analysis
Dr. Ashisha Kumar	Harmonic Analysis
Dr. Vijay Kumar Sohani	Harmonic Analysis and PDE
Dr. M. Tanveer	Fixed Point Theory and Applications

#### Rough Set Theory and Modal Logics:

Faculty	Research Area
Dr. Md. Aquil Khan	Rough Set Theory and Modal Logics

#### Information, Statistics, and Probability:

Faculty	Research Area
Dr. M. Ashok Kumar	Information Measures, Information Geometry, Robust Statistical Inference

#### Algebra:

Faculty	Research Area
Dr. Sk. Safique Ahmad	Numerical Linear Algebra
Dr. Anand Parkash	Algebra

#### Differential Equations:

Faculty	Research Area
Dr. Sk. Safique Ahmad	Stability Analysis for Stochastic Differential Equations
Dr. V. Antony Vijesh	Differential Equations
Dr. Vijay Kumar Sohani	Harmonic Analysis and PDE

#### Machine Learning:

Faculty	Research Area
Dr. M. Tanveer	Support Vector Machines, Optimization & Applications to Alzheimer disease

### Eligibility

1. Minimum first class\* Master degree in the relevant science discipline with valid NBHM/UGC-JRF/CSIR-JRF/DST-INSPIRE/GATE or Equivalent Fellowship, OR
2. Minimum first class\* M.Tech/M.Phil degree in relevant discipline, OR
3. Minimum first class\* Bachelor degree in the relevant Engineering/Technology discipline **with a valid GATE score**, OR
4. B.Tech from an Indian Institute of Technology (IIT) with a minimum CPI of 8.0.

#### \*The first class is defined as

- a. 60% marks for GEN/OBC (55% for SC/ST) category in aggregate, OR
- b. CPI/CGPA of 6.0 for GEN/OBC (5.5 for SC/ST) category on the scale of 10; with corresponding proportional requirements when the scales are other than on 10 ( for example 4.8 for GEN/OBC category (4.4 for SC/ST) on the scale of 8),OR
- c. A first class as specified by the University/Institute awarding the degree.

### Application Procedure

1. Candidates must apply **ONLINE** through the website (<http://academic.iiti.ac.in:8080/nregistration.jsp>). This will generate a unique application number for each applicant.
2. **Application Fee:** 100/- Indian Rupees to be paid through State Bank Collect (<https://www.onlinesbi.com/prelogin/icollecthome.htm>) or through a Demand Draft (DD) drawn in favour of "Registrar, IIT Indore" payable at Indore.
3. After Submitting the application online, the same is to be downloaded and the **signed hard-copy along with the State Bank Collect receipt (or Demand Draft), recent photograph, self-attested relevant copies of certificates, (for SW candidates: No Objection Certificate, Experience Certificate, last 3 months salary slip and Employer's PAN card)** must be sent to the DPGC Convener at the below-mentioned Address for Correspondence. The deadline for receiving offline/hardcopy submission is 7 days after the expiry of online submission of the discipline.
4. The candidate must write his/her name, Discipline of Mathematics and the Application Number on the back side of the Demand Draft.
5. The envelope of the application must clearly mention "Application for Admission to PhD Program in the Discipline of Mathematics".
6. The **short-listed candidates must arrange recommendation letters from at least two referees** with whom the candidate has had academic interaction for at least a year. The candidates should request the referees to send recommendation letters to [mathphd@iiti.ac.in](mailto:mathphd@iiti.ac.in).

### Address for Correspondence

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### Important Information

This is a rolling advertisement. Applications are invited throughout the year. Application deadline for the autumn 2017 semester is over now. Keep watching our discipline homepage regularly for the next announcement.