ABOUT US

Department of Mathematics is one of the basic science departments at IIT DELHI. Students with a commitment to pursuing research and career in pure, applied mathematics, and scientific computing for making a better future. They are groomed under apt academic rigor which enables them to acquire skills to form efficient solutions for the problems of industry and academics.

PROGRAMS

B.TECH IN MATHEMATICS & COMPUTING
B.TECH & M.TECH IN MATHEMATICS & COMPUTING
M.Sc. IN MATHEMATICS
AREAS OF RESEARCH

- ALGEBRA
- ALGORITHMS AND GRAPH THEORY
- APPLIED PROBABILITY
- COMBINATORIAL TOPOLOGY
- DYNAMICAL SYSTEMS AND FRACTALS
- FINANCIAL MATHEMATICS
- GAME THEORY
- HARMONIC ANALYSIS
- MACHINE TRANSLATION & ARTIFICIAL INTELLIGENCE
- NUMBER THEORY AND CRYPTOGRAPHY
- NUMERICAL ANALYSIS
- NUMERICAL LINEAR ALGEBRA
- OPTIMIZATION
- PARALLEL COMPUTING
- PARTIAL DIFFERENTIAL EQUATIONS
- STOCHASTIC MODELS

RESEARCH FACILITIES

SOFTWARES

- MODELICA
- MATLAB
- AXIOM
- MAXIMA
- GAMBIT
- MATHBUNTU
- SAGEMATH
- SCILAB

LAB

- VLSI Design and Tools Lab
- Data Analytics Lab
### COURSES OFFERED

<table>
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<td>• ABSTRACT ALGEBRA</td>
<td>NUMBER THEORY</td>
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<td>• LINEAR ALGEBRA AND APPLICATIONS</td>
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<td>• COMPUTATIONAL METHODS IN DIFFERENTIAL EQUATIONS</td>
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<td>• NUMERICAL ANALYSIS</td>
<td>NEUROCOMPUTING</td>
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<td>• OPTIMIZATION</td>
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<td>• REAL &amp; COMPLEX ANALYSIS</td>
<td>FINANCIAL MATHEMATICS</td>
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<td>• ADVANCED DESIGN OF ALGORITHMS</td>
<td>FRACTAL GEOMETRY</td>
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<td>• STOCHASTIC PROCESSES</td>
<td>PARALLEL ALGORITHMS</td>
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<td>• THEORY OF COMPUTATION</td>
<td>STOCHASTIC OF FINANCE</td>
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<td>• FUNCTIONAL ANALYSIS</td>
<td>GRAPH THEORY</td>
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<tr>
<td>• MUTIVARIATE AND STATISTICAL METHODS</td>
<td>MATHEMATICAL LOGIC</td>
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<td></td>
<td>GAME THEORY</td>
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International Journals

10. Pooja Bansal, Aparna Mehra, Multi-period additive efficiency measurement in data envelopment analysis with non-positive and undesirable data,55, Opsearch, 2018, 642-661.
28. Gupta, Rohit; and Sharma, R. K. Further results on permutation polynomials of the form (xpm−x+δ)s+x over Fp2m. Finite Fields Appl. 50 (2018), 196–208.


Conference Proceedings


# ONGOING PROJECTS

<table>
<thead>
<tr>
<th>Name of the Investigator</th>
<th>Title of the project and duration</th>
<th>Amount sanctioned (in lakhs)</th>
<th>Funding Agency</th>
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<tbody>
<tr>
<td>N. Chatterjee (Professor)</td>
<td>Development of Predictive Data Analysis System using Artificial intelligence</td>
<td>130</td>
<td>Ministry of Finance Directorate General of Goods and Services Tax Intelligence</td>
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<td>N. Chatterjee (Professor)</td>
<td>Hindi to English Machine Translation System for Judicial Domain</td>
<td>18.08</td>
<td>Ministry of Electronics and Information Technology, India</td>
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<tr>
<td>N. Chatterjee (Professor)</td>
<td>Solving Problems of Network Operations</td>
<td>225.6</td>
<td>NOKIA Solutions and Networks India Pvt. Ltd.</td>
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<tr>
<td>N. Chatterjee (Professor)</td>
<td>Hackathon for Solving Network Problems</td>
<td>75.6</td>
<td>NOKIA Solutions and Networks India Pvt. Ltd.</td>
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<tr>
<td>S. Dharmaraja (Professor)</td>
<td>Performance and Dependability Analysis and Development of Testbed of 5G Networks</td>
<td>43.04</td>
<td>Department of Telecommunication</td>
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<tr>
<td>Vikas Vikram Singh (Asstt. Professor)</td>
<td>Games and Optimization for Energy Management with Stochasticity-GAMES</td>
<td>19.08</td>
<td>DST (Indo-French)</td>
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<td>Mani Mehra (Associate Professor)</td>
<td>“Wavelet Methods for PDEs on Network”</td>
<td>6.60</td>
<td>DST</td>
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<tr>
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<tr>
<td>Shravan Kumar (Asstt. Professor)</td>
<td>“Fourier Algebras on Ultraspherical Hypergroups”</td>
<td>6.60 DST</td>
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<tr>
<td>Ritumoni Sarma (Associate Professor)</td>
<td>Study of New Types of Continues Fractions and Applications</td>
<td>6.60 DST Matrics Project</td>
<td></td>
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<tr>
<td>B.S. Panda (Professor)</td>
<td>DST Matrics Project</td>
<td>6.60 DST</td>
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# Recruitment Procedure

## JNF

Student-in-charge or placement officer, Training and Placement Cell shall provide the company a **Job Notification Form**.

JNF requires details of the job offer - role offered, pay package, place of posting, eligible documents.

Once the JNF with all the required details is received, companies are assigned username/password to access their online account at [http://tnp.iitd.ac.in](http://tnp.iitd.ac.in).

## Companies

The JNF has to be frozen on the Training and Placement Cell website by the company by a fixed date.

Students shall be able to view all the details, all the eligible candidates may apply.

After the application deadline for the students, the resumes are visible to the company. The company submits shortlist on its online account before a deadline.

## Companies

Companies are also assigned space on the server on which they may upload any presentation, videos, etc. which they want students to see.

## Shortlist

Short-listed students get notified.

The placement office allots the dates for the campus interviews.
RECRUITMENT PROCEDURE

SELECTION

After the completion of the selection procedure on campus, the company is required to announce the final list of the students on the same day itself.

*If a student is selected, the job is registered against him/her then s/he would not be allowed to appear for more interviews as per the institute’s policy.*

RESUME VERIFICATION

All claims made by students in the resumes submitted for campus placement are duly verified by the Placement Office.

The verification standards are uniform throughout the Institute.
# CONTACT US

## DEPARTMENT WEBSITE

[maths.iitd.ac.in](http://maths.iitd.ac.in)

## FACULTY COORDINATORS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Dhramaraja</td>
<td>Head, Institute Career Service</td>
<td><a href="mailto:hodtnp@admin.iitd.ernet.in">hodtnp@admin.iitd.ernet.in</a></td>
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<tr>
<td>Ms. Anishya Madan</td>
<td>Industrial Liaison Officer</td>
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<tr>
<td>Dr. Ritumoni Sharma</td>
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## TEAM MEMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>Baby Gill</td>
<td>9811540430</td>
</tr>
<tr>
<td>Tushar Singh</td>
<td>7905203429</td>
</tr>
<tr>
<td>Ashwini</td>
<td>9999219579</td>
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<tr>
<td>Tushar Singh</td>
<td><a href="mailto:mas187104@maths.iitd.ac.in">mas187104@maths.iitd.ac.in</a></td>
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<tr>
<td>Ashwini</td>
<td><a href="mailto:mas187063@maths.iitd.ac.in">mas187063@maths.iitd.ac.in</a></td>
</tr>
</tbody>
</table>

## ADDRESS

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Indian Institute of Technology, Delhi  
New Delhi - 110016  
Phone: 011-26591731/32