



भारतीय प्रबंध संस्थान बेंगलूर  
INDIAN INSTITUTE OF MANAGEMENT  
BANGALORE

DOCTORAL PROGRAMME IN  
MANAGEMENT  
**Ph.D 2022 Admissions**  
Decision Sciences (DS) Area  
Full-Time Doctoral Programme



## CHAIRPERSON'S MESSAGE

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Greetings from the Decision Sciences (DS) Area at Indian Institute of Management @ Bangalore (IIM-B)!

The DS Area at IIM-B has a distinguished faculty line-up including world-class scholars and a talented pool of researchers and PhD students. Faculty in the DS Area carry out dedicated research, teaching, and consulting activities in theoretical and applied statistics, optimization theory, business analytics, machine learning, artificial intelligence, big data methodologies, and related applications to management problems.



We are actively looking to recruit multiple PhD students for the upcoming academic year. Candidates with a strong interest and commitment to high quality research in all aspects of decision sciences or a closely related field are invited to apply. We are particularly interested in students that have a strong background in a quantitative discipline (e.g., statistics, operations research, analytics, applied mathematics, scientific computing, decision sciences, engineering, economics, computer science, etc.) from top-tier institutions.

Prospective students must have completed (or be close to completing) their MS degrees and demonstrate capability for carrying out high quality research. Exceptional students with an undergraduate degree from one of the top-tier institutions will also be considered. PhD students are expected to complete a rigorous course curriculum, work on cutting-edge research with faculty advisors, publish papers in top-tier journals, and fulfil teaching assistantship requirements. Research is an integral part of the course curriculum, with students being expected to do research assistantships and independent research studies from the very start of their PhD program. A full-fledged support system, including a systematic review and feedback process in addition to periodic milestones, is geared towards ensuring that students maximize their potential.

IIM-B offers a full scholarship for five years, including providing student housing on campus, generous support for equipment and travel to multiple domestic and international conferences. IIM-B also provides a hospitable environment to work closely with both industry and government sectors, in addition to fostering an excellent academic environment to conduct theoretical and applied research across the entire decision sciences spectrum.

Information about the Doctoral Programme can be found on our website: <https://www.iimb.ac.in/programmes/doctoral-programme>, and information regarding the Decision Sciences Area can be found here: <https://www.iimb.ac.in/decision-sciences-and-information-systems>.

If you are interested in engaging with the DS Area or would just like to say hello, feel free to drop me an email. Thanks for visiting the DS Area.

**PROF. JITAMITRA DESAI**

Chairperson, Decision Sciences

Email: [jmdesai@iimb.ac.in](mailto:jmdesai@iimb.ac.in)

## FACULTY PROFILES

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**ANANTH KRISHNAMURTHY**

Industrial Engineering, PhD  
University of Wisconsin.

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**BHUVANESH PAREEK**

Decision Science, PhD  
Indian Institute of Management Bangalore.

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**ISHWAR MURTHY**

Business Analysis, PhD  
Texas A&M University.

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**JITAMITRA DESAI**

Industrial & Systems Engineering, PhD  
Virginia Polytechnic Institute and State University.

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**PULAK GHOSH**

Statistics, PhD  
Oakland University.

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**RAJLUXMI V MURTHY**

Operations Research, PhD  
Southern Methodist University.

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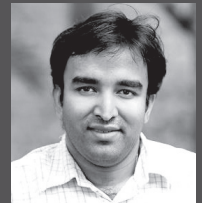




RESHMA CHIRAYIL CHANDRASEKHARAN

Industrial Engineering, PhD  
KU Leuven.

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RISHIDEEP ROY

Statistics, PhD  
University of Chicago.

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SHUBHABRATA DAS

Statistics, PhD  
University of North Carolina.

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SOUDEEP DEB

Statistics, PhD  
University of Chicago.

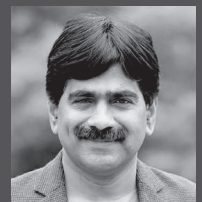
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TRILOCHAN SASTRY

Operations Research, PhD  
Massachusetts Institute of Technology.

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U DINESH KUMAR

Mathematics, PhD  
Indian Institute of Technology- Bombay.

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## JOURNAL PUBLICATION

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- “A Time-Space Network Flow Approach to Dynamic Repositioning in Bicycle Sharing Systems”, *Transportation Research Part B: Methodological*.
- “A Proximal Partially Parallel Splitting Method for Separable Convex Programs”, *Optimization Methods and Software*.
- “A Global Optimization Framework for Distributed Antenna Systems in CDMA Cellular Networks”, *Annals of Operations Research*.
- “Alarm System for Insurance Companies: A Strategy for Capital Allocation, Insurance”, *Mathematics and Economics*.
- “Binary Knapsack Problems with Random Budgets”, *Operational Research Society*.
- “Quantifying Fuzziness Due to The Scale of Measurement in Response Systems”, *Fuzzy Sets and Systems*.
- “Spares Provisioning Under Performance Based Logistic Contract: Profit Centric Approach”, *Journal of Operational Research Society*.
- “Effective Management of Performance Based Contracts for Sustainment Dominant Systems”, *International Journal of Production Economics*.
- “Optimal Package Pricing in Healthcare Services”, *Journal of The Operational Research Society*.
- “Modelling Household Finances: A Bayesian Approach to A Multivariate Two-Part Model”, *Journal of Empirical Finance*.
- “A Note on Consistent Estimation of A Dynamic Jump Intensity Model With Implications For Option Pricing”, *Journal Of Financial Economics*.
- “Saving Behaviour & Biomarkers: A High-Dimensional Bayesian Analysis of British Panel Data”, *The European Journal of Finance*.
- “Ask Your Doctor Whether This Product Is Right for You: A Bayesian Joint Model for Patient Drug Requests and Physician Prescriptions”, *Journal of The Royal Stat Society*.
- “The Lack of Memory Property in The Density Form for The Bivariate Setup”, *Communications in Statistics, Theory and Methods*.
- “The Lack of Memory Property in The Density Form”, *Statis- Tica*.
- “An Asymptotic Theory for Spectral Analysis of Random Fields”, *Electronic Journal of Statistics*.
- “A Clustering Approach for Mapping Rare Variants Based in Mutual Association”, *Human Heredity*.
- “A Direct Simplex Algorithm for Network Flow Problems with Convex Piecewise Linear”, *Costs, Optimization Methods & Software*.
- “A Second Order Upper Bound on The Expectation of Sub-Linear Polyhedral Functions”, *Operations Research*.

## CASE STUDIES

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- Enhancing Visitor Experience at ISKCON Using Text Analytics.
- Fantasy Sports: A Game of Skill or Chance.
- Food Grain Movement: Karnataka Food and Civil Supplies Corporation.
- Data Enabled Insights from Sericulture: Jayalaxmi Agro Tech.

# STUDENT PROFILES

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## Current Students (1<sup>st</sup> – 3<sup>rd</sup> Year FPM):

| Names of the Student        | Institute Graduated From                                                |
|-----------------------------|-------------------------------------------------------------------------|
| Md Shahrukh Anjum           | IIT(ISM) Dhanbad                                                        |
| Aqsa Mushtaq Peer           | BITS Pilani                                                             |
| Aishvarya                   | Banaras Hindu University                                                |
| Narendra kumar Bandi        | BITS Pilani                                                             |
| Siddharth Rawat             | IIT - BHU                                                               |
| Antra                       | Sri Venkateswara College - Delhi / Applied Operational Research - Delhi |
| Kapil Gupta                 | IIT Delhi                                                               |
| Murari Srihari Srinivasa    | IIMCalcutta                                                             |
| Chinmay Jayant Divekar      | DES Fergusson University, Pune/ Manipal Academy of Higher Education     |
| Kunal Rai                   | IISER, Bhopal                                                           |
| Boggadi Sudheer Kumar Reddy | IIT Khargapur                                                           |



## ALUMNI

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**BHUVANESH PAREEK**

Assistant Professor,  
IIM Bangalore.



**SASWAT PATRA**

Assistant Professor,  
SPJIMR.



**SAPARYA SURESH**

Assistant Professor,  
IIM Kozhikode.



**PRANJAL CHANDRAKAR**

Assistant Professor,  
Mahindra University.



**NANDINI SETH**

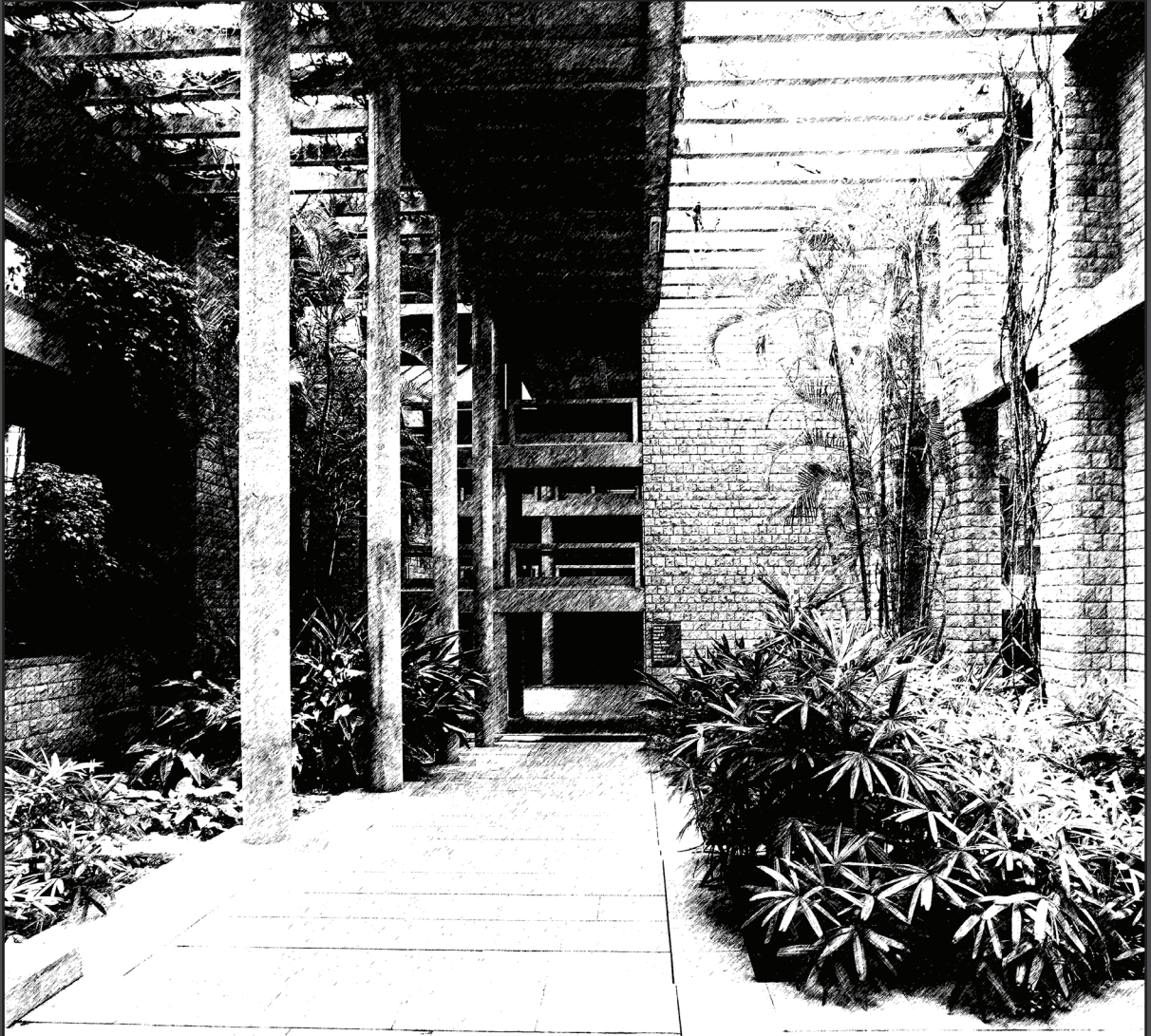
Assistant Professor, Master's Union  
School of Business.

## COURSE WORK

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|                                              |                                                    |                                            |
|----------------------------------------------|----------------------------------------------------|--------------------------------------------|
| Probability Theory                           | Statistical Inference                              | Advanced Statistical Methods and Computing |
| Mathematical Methods for Management Research | Integer Programming and Combinatorial Optimization | Computational Optimization                 |
| Linear programming and Networks              | Multivariate Statistics                            | Nonlinear and Dynamic Programming          |





*Disclaimer: Indian Institute of Management Bangalore reserves the right to change the information provided in the brochure or on the website, including the terms of the programme and its fee.*

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 LinkedIn: <http://linkd.in/1G31q38>  
 Facebook: <http://on.fb.me/1zWioPp>  
 YouTube: <http://bit.ly/1zWi8Qk>



**INDIAN INSTITUTE OF MANAGEMENT BANGALORE**  
Bannerghatta Road, Bangalore 560 076. India.