



MADRAS SCHOOL OF ECONOMICS
(INSTITUTION OF SPECIAL IMPORTANCE)

INTERNSHIP BROCHURE

2024 - 2025



<https://www.mse.ac.in/>



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LinkedIn Profile: Placement Office, Madras School of Economics

CONTENTS

• Chairman's Message	3
• Director's Message	3
• About MSE	4
• Faculty Profile	5
• Course Structure - PGDM	6
• Course Structure - MA	7
• Course Structure - M.Sc. Data Science	12
• MSE Research Cell	13
• Batch Profile 2024-25	14
• Past Recruiters	16
• Contact Us	17



C. Rangarajan

Chairman, Madras School of Economics

“ *A unique blend of teaching and research* ”

MSE is not a general school. We focus on our core strengths of economics and finance with the quantitative rigor of analysis and litmus test of practical application. At MSE, we create an environment for our students to not only find their specific interests but also inspiration. After all, if we are going to fulfill our dream of a 5 trillion economy in 5 years, we need lots of inspired work!

Former Governor of RBI

Former Chairman of PM's Economic Advisor Council

Dr. N. R. Bhanumurthy

Director, Madras School of Economics

“ *Well-trained, productive, and socially responsible students* ”



With the help of six Post-graduate programs and two PGDM programs, MSE has a long tradition of undertaking research & training in economics and quantitative finance that caters to academia, financial markets, regulatory institutions, and consulting firms. One major area where MSE students are unique is their rigorous training in practical economics and finance theory applications. As India aspires to become an advanced nation by 2047, it is necessary to train young minds in that direction and make them more productive and socially responsible. We at MSE, with our strong curriculum and well-trained faculty, believe our students are all set to achieve the nation's dream.



ABOUT

MSE is an Institute of Special Importance, recognized by the MSE Act, 2020

Madras School of Economics (MSE) is one of the premier institutions in the country for post-graduate teaching and research in Economics, Finance, Environment, Management, and Data Sciences. Started as a non-profit institution, MSE was formed by a group of industrialists, academicians, and economists with a mandate to groom cohorts of qualified professionals who would impact the public policy and private industry of a vast, growing country.

The school is privileged to be led by the celebrated economist, former Chairman of PM's Economic Advisory Council, former Governor of RBI, Andhra Pradesh, and Padma Vibhushan awardee, Prof. Dr. C. Rangarajan.

MSE offers two full-time, two-year programs: the Post Graduate Diploma in Management (PGDM) and the Master of Arts (MA). The PGDM program includes two specializations: Research & Business Analytics and Finance. The MA program offers 5 specializations: General Economics, Financial Economics, Applied Quantitative Finance, Actuarial Economics, and Environmental Economics. Additionally, MSE also offers a BA (H) program in Economics and will be offering an M.Sc. in Data Science from the AY 2024-25, under its status as an Institute of Special Importance, recognized by the MSE Act 2020, Government of Tamil Nadu.

The dual emphasis at MSE on rigorous theory combined with practical real-world application ensures that MSE students are a class apart with functional skills readily applicable in the professional world.

FACULTY PROFILE

Dr. N. R. Bhanumurthy

Director & Professor
Ph.D. (International Finance), ISEC, Bangalore

Dr. K.S. Kavi Kumar

Professor
Ph.D. (Development Economics), IGIDR, Mumbai

Dr. Saumitra Bhaduri

Professor
Ph.D. (Economics), IGIDR, Mumbai

Dr. Naveen Srinivasan

Professor
Ph.D. (Economics), Cardiff Business School, Cardiff University, UK

Dr. Brinda Viswanathan

Professor
Ph.D. (Economics), IGIDR, Mumbai

Dr. Rakesh Nigam

Professor
Ph.D., Stanford (Applied Physics)

Dr. Zareena Begum Irfan

Professor
Ph.D., Indian Institute of Technology Roorkee

Dr. Ekta Selarka

Associate Professor
Ph.D. (Economics), IGIDR, Mumbai

Dr. Amrita Chatterjee

Assistant Professor
Ph.D., Jadavpur University, Kolkata

Dr. Neelanjan Sen

Assistant Professor
Ph.D. (Economics), University of Calcutta

Dr. Parthajit Kayal

Assistant Professor
Ph.D. (Finance), IFMR

Dr. Devasmita Jena

Assistant Professor
Ph.D. (International Trade & Development), Jawaharlal Nehru University

Dr. Sanjeev Vasudevan

Assistant Professor
Ph.D. (Economics), IIT Madras

Dr. Gautham Sekar

Assistant Professor
Ph.D. (Cryptography), KU Leuven

Dr. Gopal Krishna Roy

Assistant Professor
Ph.D. (Economics), Jawaharlal Nehru University

Dr. Aritri Chakravarthi

Assistant Professor
Ph.D. (Economics), Centre for Developmental Studies, Jawaharlal Nehru University

Dr. Poorna Narayanan

Assistant Professor
Ph.D. (Mathematics), IIT Madras

Dr. Arpita Choudhary

Assistant Professor
Ph.D. (Astronomy & Astrophysics), Thuringer Landessternwarte Tautenburg, Germany

Dr. Blessy Augustine

Assistant Professor
Ph.D. (Economics), IFMR

Dr. Purbita Jana

Assistant Professor
Ph.D. (Mathematics), University of Calcutta

Dr. Sweta Sen

Assistant Professor
Ph.D. (Economics), IIT Kharagpur

Dr. Rupel Nargunam

Assistant Professor
Ph.D. Actuarial Science, BSA Crescent Institute of Science and Technology, Chennai

Dr. Steffy Carmel

Lecturer
Ph.D. (Economics), Pondicherry University

Dr. Srikanth Pai

Assistant Professor
PhD (Electrical Communication Engineering) IISc, Bangalore

Dr. Aariya Sen

Assistant Professor
PhD (Management), IIM Kozhikode

Post Graduate Diploma in Management

58.8%
Experienced
(incl. internship)

MSE offers a Post-Graduate Diploma in Management with specializations in Research & Business Analytics (RBA) and Finance. The PGDM program at MSE is unique as we follow a quantitative approach built on the economics and finance legacy of MSE. Our curriculum creates professionals well-trained in economic/financial theories, programming, and develops strong knowledge in analytics. Our curriculum includes courses on data science and security such as big data, artificial intelligence and its applications to business, machine learning, deep learning, advanced analytical models for decision making, and cryptography. The PGDM program creates focused individuals ready to deploy their skills in the real world.

All our management students get a thorough grounding in mathematics, statistics, and econometrics. They are well-versed in python, financial analysis, and business applications. Their hands-on experience with data analytics, gained through their respective courses, which will enhance their strong implementation skills.

What uniquely distinguishes MSE management students is their ability to apply economic and analytical thinking to solve real-world problems, a natural consequence of MSE's core competencies in economics.



17

17



Career Paths



Data Science



Financial
Analytics



Business
Analytics and
Intelligence



Risk
Management



13 MONTHS

Avg. Work Experience

Core Courses (1st year)

- Microeconomics
- Macroeconomics
- Advanced Macroeconomics
- Financial Econometrics
- Stochastic Process
- Supply Chain Management
- Quantitative Methods
- Optimization
- Analytics in Business
- Financial management
- Probability
- Finance 1
- Statistical Inference and Modeling
- Machine learning 1
- Corporate Finance
- Big Data
- Programming and Projects in Python

Electives (2nd year)

- Applied Multivariate Statistics
- Advanced Analytical Models for Decision Making
- Algorithmic Trading
- AI Applications in Business
- Asset Pricing
- Computational Finance
- Derivatives and Options Pricing
- Financial Market Microstructure
- Stochastic Calculus
- Programming in SQL

M.A. Actuarial Economics

34.6%
Experienced
(incl. internship)

The program has been designed and developed as a unique, application-oriented course in economics relevant to today's liberalized economic environment. The core course subjects lay the foundation for basic economic theory, and the various specializations offered provide students with a practical understanding of how these concepts are applied in real-world economies. In the first year, the curriculum emphasizes Actuarial Mathematics and Financial Mathematics.

The department has collaborated with different institutions on various projects, including an analysis of the Tamil Nadu Pension System for the Expert Committee on Pensions.



Career Paths



Analytics



Actuaries



Corporate Social Relationships



Social Enterprise and Rural Development



7 MONTHS

Avg. Work Experience

Core Courses

- Actuarial Mathematics
- Economics of Insurance I
- Economics of Insurance II
- Finance and Financial Reporting
- Risk Models

Electives

- Games and Information
- Advanced Techniques in Finance
- International Trade
- Finance Regulation
- Banking Supervision

M.A. Applied Quantitative Finance

45.2%
Experienced
(incl. internship)

The ability to adequately capture stylized facts in financial markets depends mainly on good models and their evaluations. Recent advances in Statistical, Econometric, and Analytical modeling techniques have enhanced the scope for a comprehensive and timely analysis of related issues. Consequently, there has been an exponential increase in the demand for qualified analysts.

The course is structured to present central concepts in analytics, mathematics, and computational details, with an emphasis on underlying institutional factors. Students are rigorously mentored to emerge as professionals with cutting-edge quantitative and analytical tools, highly valued by employers in the global financial markets.



11

20



Career Paths



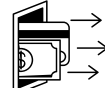
Data Analysts



Risk Management



Financial Modelling



Credit
Underwriting



6.7 MONTHS

Avg. Work Experience

Core Courses

- Risk Analysis and Management
- Financial Instruments and Markets
- Interest Rate Calculation and Option Pricing

Electives

- Stochastic Models
- Fixed Income Securities
- Investment Banking
- Advanced Techniques in Finance Economic Policy Analysis
- Health Economics & Financing Development Economics

M.A. Environmental Economics

34.5%
Experienced
(incl. internship)

Growing evidence on economy-environment inter-linkages and potential challenges that the world economy has to face due to global climate change are some of the principal motives behind introducing this two-year postgraduate degree program in Environmental Economics.

The objective of this program is to provide students with rigorous and specialized training in the economics of the environment. The degree is designed for individuals with a strong background in mathematics and good exposure to basic economics.

On the completion of a master's degree, all the students will have well-developed skills in quantitative analysis and modeling with an understanding of economic approaches to resolve the challenges of resource over-exploitation and misuse of the environment.

Department members have worked on projects sponsored by various national and international organizations including - MoEF&CC, GoI; GoTN; CPCB; DoE-TN and World Bank; GIZ; SANDEE; GDN; NCSCM, etc. The faculty members have also collaborated with various universities in and outside India.



8

21



6.8 MONTHS

Avg. Work Experience

Core Courses

- Resource and Environmental Economics
- Environmental Valuation
- Sustainable Development
- Environmental Policy

Electives

- Economics of Global Climate Change
- Environment & Health Trade
- Environment Ecological Economics

Career Paths



Think-Tanks



Analytics



Government Bodies



Consulting

M.A. Financial Economics

33.3%
Experienced
(incl. internship)

Financial Economics at MSE is a niche course in finance meant to effectively cater to the needs of the fast-growing Indian financial sector. The students qualifying to take the course get trained to meet the demand for financial practitioners. They are well equipped with a good foundation in Economics, Mathematics, and Statistics facilitated by training in emerging theoretical and empirical tools to understand the financial sector better.

In the challenging economic scenario, MSE encourages students to emerge as enterprising finance professionals who don't just react and adapt to upcoming trends but are also capable of evolving as agents of change.

The department is involved with different institutions collaborating on various projects and research, such as GE Money – MSE Decision Science Lab. Rigorously mentored, equipped with leading quantitative and analytical tools, highly valued by employers in global financial markets.



12

24



5.4 MONTHS

Avg. Work Experience

Core Courses

- Financial Economics
- Applied Macro and Financial Econometrics
- Financial Regulation and Banking Supervision

Electives

- Stochastic Models
- Fixed Income Securities
- Economics of Insurance
- Development Economics

Career Paths



Investment Banking



Private Equity



Corporate Financial
Management



Consulting

M.A. General Economics

41.2%
Experienced
(incl. internship)

There is a renewal in the emphasis on the state as a regulator, and markets are likely to play a more central role in the exchange process of production and consumption. This will create interesting feedback between the macro and micro aspects of the economy thereby affecting wider economic developments.

The first two semesters focus more on the conceptual foundation of microeconomics, macroeconomics, statistics, and mathematical methods followed by advanced courses. The last two semesters strengthen their analytical and communication skills with assignments/term papers and presentations/group discussions.

Faculty members have been involved with projects/consultancies that impact employment and the long-term welfare of citizens.

The department also collaborates with institutions like - National Council of Applied Economic Research, World Institute for Development Economics Research, Emergent Ventures (Mercatus Center, George Mason University), UNEP - Green Economy Report.



10

24



6.5 MONTHS

Avg. Work Experience

Core Courses

- Industrial Organization
- Games and Information
- Development Economics
- Applied microeconomics
- Econometrics

Electives

- Stochastic Models
- International Trade
- Environment & Health Economics
- Economics of Insurance

Career Paths



Data Analysts



Policy Supervisors



Government Bodies



Economic/ Policy Consultants

M.Sc. Data Science

33.3%
Experienced
(incl. internship)

The M.Sc. Data Science program at Madras School of Economics provides a rigorous curriculum that equips students with essential analytical, technical, and problem-solving skills. By bridging theory and practice, the program prepares graduates to meet industry demands, tackle complex data challenges, and deliver innovative solutions across sectors. Students leverage advanced tools like machine learning, AI, big data, and cloud computing through real-world projects, gaining proficiency in data analysis, modeling, and effectively communicating results to drive business decisions.

In addition to technical expertise, our program emphasizes critical thinking, creativity, and adaptability - qualities that are essential for success in the fast-evolving world of data science. Distinctive in its approach, the program cultivates a unique blend of innovation, interdisciplinary expertise, and industry relevance, setting our graduates apart in the competitive field of data science.



13

5



Career Paths



Artificial Intelligence
& Machine Learning
Development



Financial
Simulation and
Modeling



Data
Engineering
and Security



Quantitative
Analytics & Business
Intelligence



10.7 MONTHS

Avg. Work Experience

Core Courses

- Mathematics for Data Science
- Statistics with R
- Programming in Python & MATLAB
- Introduction to Data Science
- Introduction to Artificial Intelligence
- Econometric Methods
- Cryptography & Blockchain
- Numerical Methods & Simulation Techniques in Finance
- Introduction to Machine Learning
- Verifications & Algorithms for Big Data
- Deep & Reinforcement Learning
- Big Data & Hadoop/Spark

Electives

- Stochastic Differential Equations in Finance
- Multivariate Statistics
- Big Data Visualization
- Time Series Analysis
- Large Language Models
- Stochastic Processes.
- Cloud Computing & Big Data
- Mathematical Finance
- Topology for Data Science.
- Game Theory
- Quantum Computing
- Medical Analysis
- Data Privacy & Security



RESEARCH CELL

Undertaking research is a crucial aspect of academic work at MSE. The research cell is an organization primarily driven by students, to promote economics-related activities on campus. This cell facilitates the convergence of econometric studies in quantitative economics and finance.

Athena, the annual school magazine of MSE gives a platform to students, academicians, corporate leaders, and social groups alike to express ideas, and opinions thereby promoting economics research, and finance resulting in diversified learning.

Website Link:

<https://researchcellmse.wixsite.com/blog/about-us>

NULL SPACE MSE PGDM

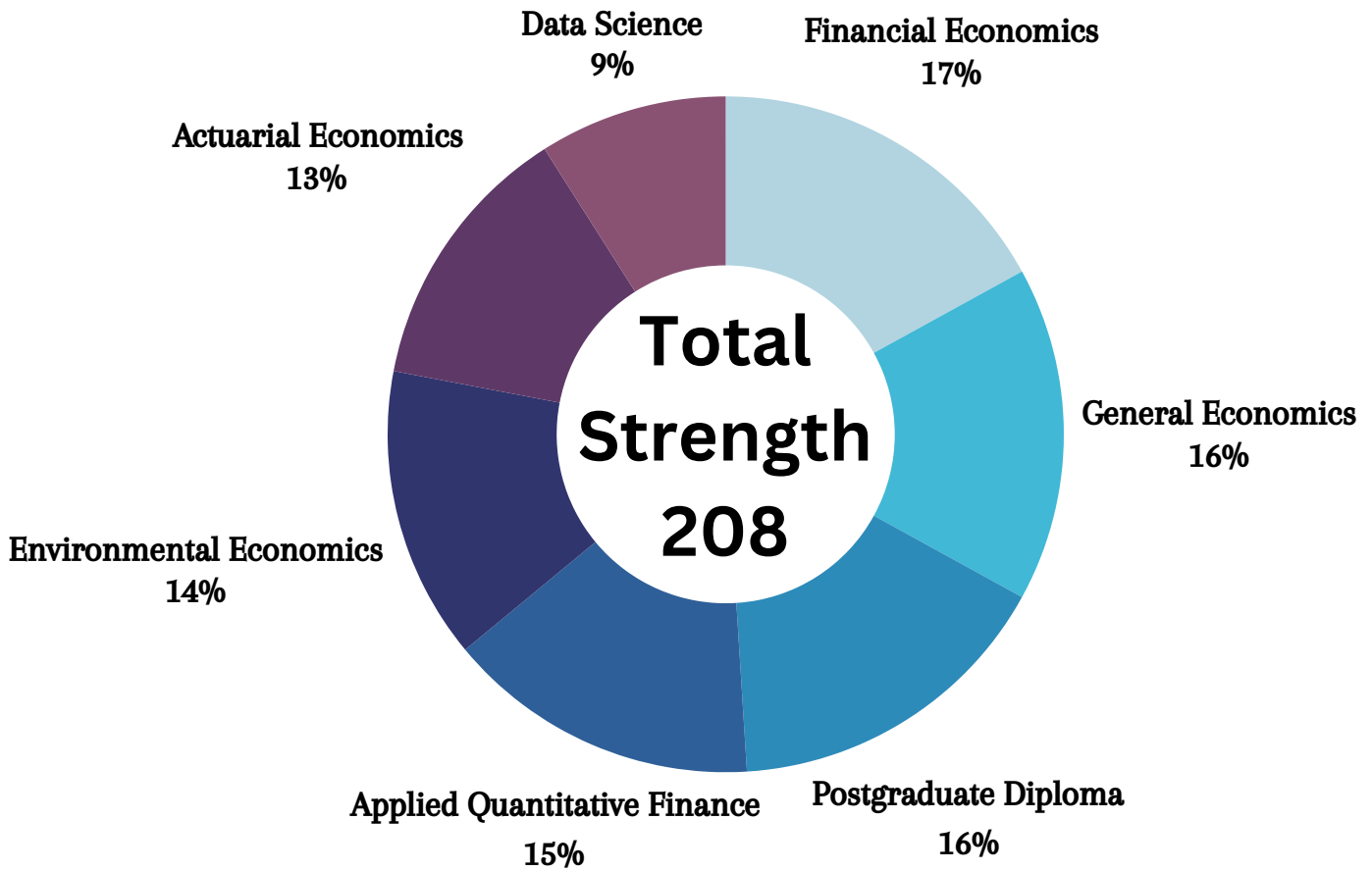
The Research and Analytics Cell of MSE PGDM students is known as Null Space. This is constituted to enable students to conduct quality research and do live projects in various fields.

Website Link: <https://github.com/nullspacemse>

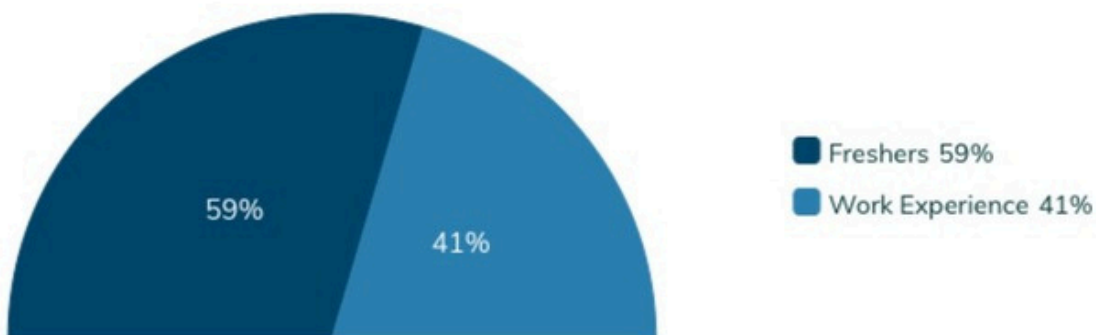


BATCH PROFILE

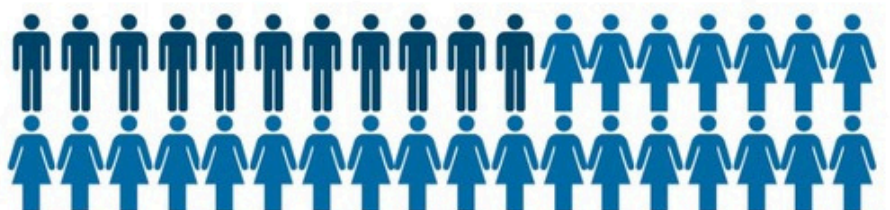
Programme-Wise Distribution



Work Experience and Gender Diversity



37% Male
62% Female

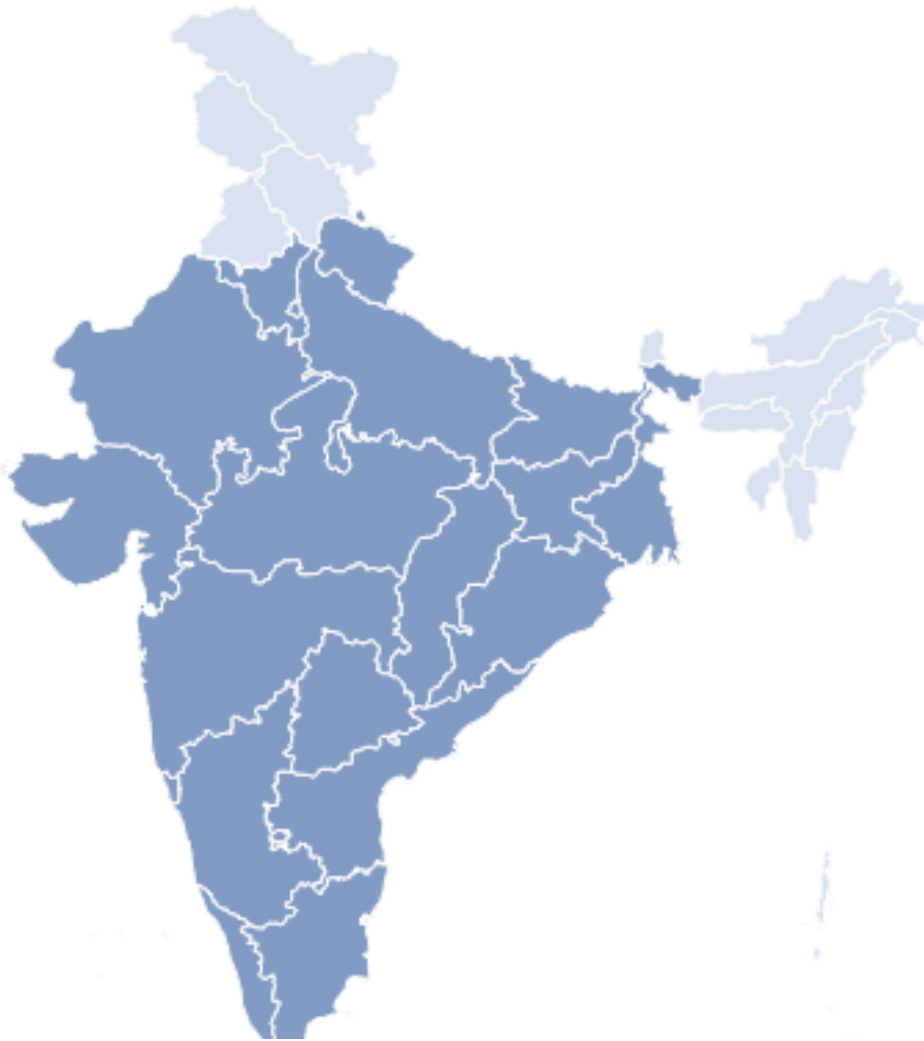




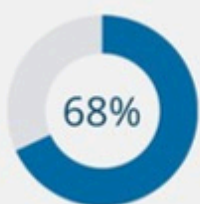
BATCH PROFILE

Batch Diversity

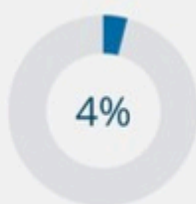
Representation across 19 States



Educational Background



Economics



Engineering



BBA



BCOM



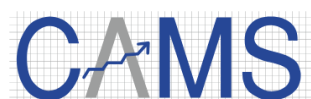
Others

PAST RECRUITERS

PROMINENT RECRUITERS



PAST RECRUITERS



CONTACT US

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FACULTY COORDINATORS

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PGDM Research & Business Analytics

Albin Saji | 6282090268

M.A. Actuarial Economics

Akshaya T V | 9677162470

M.A. Applied Quantitative Finance

Preethi V | 8883135555

M.A. Environmental Economics

Dyuti Das Mahapatra | 8925271549

M.A. Financial Economics

Shreya Das | 9330165656

M.A. General Economics

Arushi Sehra | 9911215581

M.Sc. Data Science

Ishika Goel | 7550066004



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