

### The Economics Unit

The Economics Unit of IIT Delhi has nestled within the Humanities and Social Sciences department. It has a renowned faculty actively engaged in research covering Mechanism Design, Health Economics, Labor Economics, Applied Econometrics, Development Economics, and Structural Change. The unit has an established legacy for training exemplary scholars through its PhD program.

Heeding the gap between traditional Economic education and modern Economics, the unit conceptualized a research-based Masters program that emphasizes quantitative techniques with empirical application and aims to teach analytical competence to its students. It is a two-year full-time Master of Science program spread over four semesters that offers students a choice of four specializations:

- 1) Microeconomics 2) Macroeconomics
- 3) Quantitative Economics 4) Development Economics

The dynamic curriculum and opportunity to engage with faculty and students from other social sciences and engineering disciplines places our students in a unique position to leverage technology and produce cutting-edge research.

Visit us at <a href="https://econ.iitd.ac.in/">https://econ.iitd.ac.in/</a>

### **Faculty Coordinators**

#### **HSS Department**

Prof. Varsha Singh

Contact: vsingh@iitd.ac.in

#### **Economics**

Prof. Sourabh B Paul

Contact: sbpaul@hss.iitd.ac.in

Prof. Ankush Agrawal

Contact: ankush.agrawal@hss.iitd.ac.in

#### **Nucleus PG Coordinator**

Siddharth Gupta +91-9871012292 siddharthgupta234@gmail.com

# Program Highlights

### Inter-Disciplinary Courses:

The curriculum at IITD encourages students to partake in inter-disciplinary courses from other departments of the institute for a holistic learning experience. Some popular courses and skills students acquire include Business Intelligence, Data Mining, Causal Inference and Impact Assessment and Mathematical Modelling of Credit Risk.

### **Advanced Econometrics & Time-Series Analysis**

The course trains students in modern econometric tools, focusing on mathematical rigor and practical skills to analyze real-world data. Students are required to undertake multiple projects to be adept at analysis and are encouraged to participate in research

### **Empirical Training**

Unique to the program at IITD, the course is a fast-paced foray into computer science for Economists. Designed to cater to the needs of the modern researcher, it trains students in Python, Stata, and R to acquaint them with the world of Data Science.







## Development Economics

Designed to cultivate future policymakers, the course equips students with the theoretical knowledge to tackle pressing challenges developing nations face. Students are required to critically evaluate research papers to excel in the course.

## Roles we fit in







- Data Analytics
- Risk Analytics
- Marketing Analytics
- Data Science

- Consulting
- Market Research
- Quantitative Research

- Investment Banking
- Credit Risk management
- Market Risk management

## Courses Offered

## **Economics**

- Advanced Microeconomics
- Advanced Macroeconomics
- Development Economics
- Advanced Econometrics
- Economics Lab
- Game Theory and Mechanism Design
- International Trade
- Time Series Econometrics and Forecasting
- Machine Learning for Computational Finance
- Stochastic Processes and its Applications
- Financial Mathematics
- Multivariate Statistics
- Labor Economics
- Health Economics

## Electives

- Business Intelligence
- Causal Inference and Impact Assessment
- Mathematical Modeling of Credit Risk
- Optimal Control Theory
- Computer Programming
- Social Computing
- Rural Development
- Stochastic Control and Reinforcement Learning
- Operations Research
- Management Accounting
- Principles of Artificial Intelligence

# Faculty Profiles – Economics

**Ankush Agrawal** Research Areas:

Ph.D. IGIDR, Mumbai

India's official statistics, Applied Econometrics,

**Development Economics** 

**Debasis Mondal** Research Areas:

Ph.D., Economics, ISI, Kolkata

Macroeconomics, International economics and Public

economics

**Javan Jose Thomas** Research Areas:

PhD in Development Economics, IGIDR, Mumbai

Labor, industrialization and the macroeconomy

Reetika Khera

Research Areas:

Ph.D., Economics, Delhi School of Economics

Social policy in India, including health and nutrition, education, social protection, employment, poverty,

inequality, impact of digital technologies in welfare.

Saptarshi Mukherjee

Ph.D., Quantitative Economics, ISI Delhi

Mechanism design, Social choice, Game theory,

Bounded rationality theory.

Sisir Debnath

Research Areas:

Ph.D., Economics, University of Virginia, 2013 Research Areas:

Development Economics, Applied Microeconomics,

Health Economics

Sourabh B Paul Research Areas:

Ph.D., Economics, University of British Columbia

Trade and Development, Applied Econometrics,

Labour Economics, Health and Nutrition

Rohit Kumar

Research Areas:

Ph.D., Economics, Toulouse School of Economics Econometrics, Empirical IO, Machine learning.

Abhijit Banerjee

Research Areas:

Ph.D., Economics, Yale University, U.S.A. Applied Micro and Game Theory, topics in

Agricultural, Resource, Experimental and Behavioral

economics.