



Econschool

Preparation for graduate study in economics

For students aiming at master's and PhD programs worldwide

Teaching since 2003 ■ Founded 2009 ■ www.econschool.in

In 2003 Amit Goyal, then in the second year of the MA at the Delhi School of Economics, saw how far an undergraduate degree leaves a student from the mathematics a master's program assumes. Over the summer break he taught a preparatory course for the DSE entrance examination: eighteen took it, twelve were admitted. He taught it again each summer, and founded Econschool in 2009.

The school prepares students from varied backgrounds for the entrance examinations to master's and PhD study, chiefly the MSQE at the Indian Statistical Institute, and for the quantitative work those programs demand. The main program runs for a year, taught online, with a test series alongside it and workshops on Python and R.

Lecture courses, problems, past papers, and the forum are open to anyone, and kept up as study material in their own right.

Current programs, fees, and dates: www.econschool.in/programs

Students

- Preparing for the ISI MSQE and similar entrance examinations in quantitative economics
- Applying to master's and PhD programs abroad, who need the core theory and the mathematics behind it
- Already in a master's or PhD program, wanting firmer foundations
- Working through economics on their own

What it assumes

- An undergraduate background in economics, mathematics, statistics, or engineering
- Calculus and algebra at the level of a first university course — the rest is built up from there
- A willingness to sit with a problem before looking at the solution

The programs are taught online and in English, and are open to students anywhere.

Problems come first. A topic opens with a question rather than a statement. The model is assembled while solving it, so each assumption arrives when it is needed and its role is visible.

Nothing is quoted without derivation. Results used in class are derived in class. Where a proof is long it is set as a problem and worked through, not skipped.

Results are drawn as well as derived. Where a model can be seen — an Edgeworth box, a budget set, a sampling distribution — it is drawn, and often built as an interactive tool, so that an assumption can be changed and its consequences watched.

You write the answer. Sessions are paced so that students attempt a problem before it is discussed; the Test Series then puts the same skill under time pressure. Questions are taken on the forum, where the answer stays visible to whoever reads it later.

Microeconomics

Consumer theory
Producer theory
Markets
General equilibrium
Expected utility
Game theory
Public goods and externalities
International trade

Probability and statistics

Counting
Probability
Random variables
Central limit theorem
Inference and estimation
Hypothesis testing

Mathematics

Sets, logic, and relations
Single-variable calculus
Multivariable calculus
Real analysis
Linear algebra
Convexity
Unconstrained optimization
Constrained optimization

Econometrics

Theory
Linear regression
Dummy variables

Macroeconomics

Goods market (IS)
Money market (LM)
Aggregate demand
Aggregate supply
Labour market
Equilibrium
Open economy
Solow model

Computation

Python and R for economics
Simulation and plotting
Offered as workshops

Topic-by-topic syllabus: www.econschool.in/programs/preparatory-program

Preparatory Program

Economic models taught through structured problem-solving, for students preparing for the ISI MSQE and similar examinations.

Format	Live online, in English
Schedule	Sundays, 2.5 hours a week
Lecture time	About 100 hours
Includes	The Test Series
Instructor	Amit Goyal

Dates and fee for the current batch are on the programs page.

Test Series

Regular timed practice on problems drawn from past papers and beyond, run across the full admission cycle.

- About 25 topic-wise quizzes from ISI and DSE past papers, with further practice problems
- 30 live online tests on a fixed schedule
- 4 ISI mock exams and 4 comprehensive exams
- Worked solutions to selected ISI and DSE questions
- A discussion group alongside the tests

Workshops on Python, R, mathematics, and statistics run through the year: www.econschool.in/programs

Everything below is on the site and needs no enrolment.

Study material

- **Problems and tools** — problems by topic, many with full worked solutions, and interactive tools for exploring the models
- **Online lectures** — video courses in microeconomic theory, mathematics, problem-solving, and computation with Python and R
- **Past year exams** — entrance papers from ISI, DSE, and JNU
- **References** — notes, books, courses, and problem sources across the subjects

www.econschool.in/learn

Elsewhere

- **The forum** — ask a question and think alongside others. Open to anyone studying economics, not only entrance candidates.
forum.econschool.in
- **YouTube** — lectures and problem sessions, worked on screen.
youtube.com/@econ.school
- **The Econ Artbook** — one hundred mathematical postcards: economic results drawn as figures, made in TikZ.
amitkumargoyal.com/artbook

More than a thousand students have taken a course here since 2003. Econschool has kept a public list of those admitted to leading economics programs since 2010: the ISI MSQE from 2010 to 2026, and the Delhi School of Economics and IGIDR from 2010 to 2020. Names are listed year by year, with the program each student took.

Former students have gone on to PhD study at Harvard, NYU, and elsewhere. Two of them now teach here: Sumit Goel, gold medallist in the MSQE at ISI and later a PhD at Caltech, and Nidhi Jain, who took her MA at the Delhi School of Economics and her PhD at Shiv Nadar University.

The list is published in full rather than summarized, so that it can be checked.

The full record, 2010–2026: www.econschool.in/about/past-results



Amit Goyal

Instructor

MA Economics, Delhi School of Economics (2004)

BA (Hons) Economics, Ramjas College, University of Delhi (2002)



Nidhi Jain

Instructor

PhD Economics, Shiv Nadar University (2024)

MA Economics, Delhi School of Economics (2013)



Sumit Goel

Instructor

PhD Social Science, California Institute of Technology (2023)

MSQE, Indian Statistical Institute, Delhi (2017)



Vikas Gupta

Tech Lead

B.Tech Computer Science, Kurukshetra University (2000)



Econschool

The material stays on the site whether or not you enrol.

www.econschool.in ■ forum.econschool.in

amit@econschool.in