

SHIV NADAR UNIVERSITY

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Department of Economics

School of Humanities and Social Sciences

Prospectus

M.Sc. in Economics

SHIV NADAR  
UNIVERSITY  
DELHI NCR

## Overview

The Department of Economics at Shiv Nadar University is a premier economics department in India. Established in 2012, it has quickly established its reputation as one of the leading centres of economics education and research. The department offers a two-year Master's program in Economics.

The two-year Master's program in economics is a top tier post-graduate program in economics in India. The students admitted to the program will receive training within a nurturing environment, supported by faculty members who are working at the forefront of research in their respective fields. Areas of research for current faculty members include Development Economics, Environmental Economics, Macroeconomics, Labour Economics, Economic Growth, Public Economics, Game Theory, Network Theory, Industrial Organization and Political Economy. The curriculum imparts a theoretical foundation with strong emphasis on real-world application, resulting in a solid grounding in quantitative methods and econometrics. The admitted students receive rigorous training in tools of economic analysis which enables them to contribute creatively to academia, the corporate sector, the social sector and policy making.

## Eligibility Conditions

Minimum qualification for admission to M.Sc. program is an undergraduate degree (in any discipline) with 55% in aggregate. Knowledge of Mathematics at an undergraduate level is useful though not necessary. Selection to the Masters is based purely on the performance in the admission test.

**Note: Please note that not all candidates meeting the minimum eligibility criteria may be shortlisted.**

## Course Structure:

The Master's program involves a successful completion of 16 courses (10 compulsory and 6 optional). Additionally, students have to complete a non-credit course on Programming Language offered in the first semester. Further, all university requirements should be met. For details please refer to the SNU website: [www.snu.edu.in](http://www.snu.edu.in)

The first-year course work consists of 8 compulsory courses and one non-credit course:

Semester I (Monsoon Semester)	Semester II (Spring Semester)
Microeconomics I	Microeconomics II
Macroeconomics I	Macroeconomics II
Mathematical	Computational Economics
Methods Statistics	Econometrics I
Programming Language (non-credit)	

The second year (Semester III and Semester IV) involves 2 compulsory courses in Semester III

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Semester III (Monsoon Semester)	Semester IV (Spring Semester)
Econometrics II	Elective III
Game Theory	Elective IV
Elective I	Elective V
Elective II	Elective VI

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The following is the list of *possible optional courses* offered by the department:

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Advanced Mathematical Economics	Financial Economics
Industrial Organisation	Corporate Finance
Public Economics	International Finance
International Trade	Time Series Analysis
Environmental Economics	Development Economics
Growth and Business Cycle	Social Choice Theory
Machine Learning in Economics	Labour Economics
Health Economics	Mechanism Design

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In semesters III and IV, students can also opt for a project course in lieu of a taught course, spread over two semesters, where they work under the supervision of a faculty member to develop a Master's thesis.

**Note: The course structure is subject to change with approval from the academic council of the university. Students will be informed about these changes (if any) prior to the commencement of the program.**

## Programme outcomes:

The programme is designed to provide the students with a rigorous and thorough understanding of the foundational aspects of economics and to bring them closer to the frontiers of current research in economics. At the **end of the first year**, students will be able to:

- understand various frameworks to study choice and decision-making, especially under situations of uncertainty;
- analyze strategic situations (such as bargaining and auctions) through game theoretic tools;
- identify and explain theories related to market structures, governments and institutions; qualitatively and quantitatively explain the past and predict future economic events; and analyze consequences of the actions (such as policies) for individuals and the society at large;
- develop a deep understanding of causation; analyze data sets to estimate relationships between variables of interest utilizing the tools of statistical inference;
- possess the necessary mathematical skill set to formally model microeconomic and macroeconomic questions of interest;
- understand the dynamic nature of the economy and analyze issues such as economic growth, asset pricing and business cycles.

Students then build on these basic skills by studying optional courses offered in the second year. Depending on the optional courses chosen by the student, **at the end of the second year**, she should be able to:

- analyze how markets function, and how market structure influences the behaviour of the market participants (such as firms and consumers, or the government through its policies) and how such behaviour in turn affects market structure;

- understand the rationale behind design and implementation of policies, and recommend public policies by evaluating a situation through the lens of welfare and general equilibrium analysis;
- estimate cost and benefits of non-market goods such as environmental resources; understand current pressing environmental issues through welfare economics; understand how human interactions with the environment may result in sub-optimal outcomes; and analyse the possibility of collective action;
- possess the requisite knowledge to understand the theoretical underpinnings of trade and relate the formal models and empirical studies to current trade issues;
- comprehend and assimilate the challenges faced by renewable and non-renewable energy producers, and how those challenges relate to market structures and competition; understand the usefulness of energy futures, energy forwards, energy options, swaps and other financial instruments and hedging tools which are used in national and international trade of energy products and commodities, either over the counter or at designated exchanges;
- undertake credible time series analysis for economic, financial, agricultural, and weather data so as to generate reliable medium to short term forecasts.

## Tuitions and financial aid:

The department offers 15 assistantships. Of the 15 assistantships, 10 assistantships will be assigned based on pure merit (that is, based on the entrance test results). Up to five students who secure admission, but fail to be within the top 10 students who secure assistantships based on merit, can receive assistantships if a need is established. If an applicant considers himself/herself eligible for a need-based fellowship, he/she needs to apply for the same before the deadline (which will be announced). One can apply for the need-based fellowship by sending an email to [econgrad@snu.edu.in](mailto:econgrad@snu.edu.in), along with the following documents:

- a) Class XI-XII School Fee Receipt of the applicant. If school receipts are not available, a certificate from the school, stating the amount paid as fees, is acceptable.
- b) Income Tax Receipts of all earning members of the family for the last 2 years.
- c) A statement explaining why the candidate considers himself/herself eligible for a need-based fellowship.

The decision of the department will be final in this regard.

If there are no successful claimants for these five (or any part of that) assistantships based on need among those who have secured admission, these assistantships will be filled based on merit (based on the entrance test) from the rest of the candidates who have secured admission.

For more details on tuition fees and assistantship please refer to the university website [www.snu.edu.in](http://www.snu.edu.in).



## Hostel Facilities

All academic programs at SNU are fully residential. Please see above for hostel fees and mess charges. Students must abide by all university rules to stay in the hostel.

## Placements:

Shiv Nadar University hosts a Career Development Centre (CDC) that manages the placement of the Masters students into the corporate and non-profit sectors. In the past few years, students have been placed in organizations like Bank of America, CBRE, Dell, Deloitte, IIP, Nagarro, and Trivitron.

Students from previous batches of the M.Sc. program have been successful in getting offers in Ph.D. programs from reputed universities and institutes like Pittsburgh, Georgia State University, Tulane University, Bocconi University, Stony Brook University, Cornell University and Deakin University. Students can also choose to do a Ph.D. at Shiv Nadar University subject to meeting qualification requirements and clearing admission tests and interviews as published during the year of admission to the Ph.D. program.

## How to Apply

Online application forms for the M.Sc. program can be obtained from the departmental website. The application fee for the M.Sc. program can be paid online.

- Normally a written admission test is held across four cities in India: New Delhi, Kolkata, Bengaluru and Mumbai. Candidates are informed about the venue of the test at least a week before the exam date. **However, this year an online exam will be conducted given the public health situation.**
- The **M.Sc. (Economics) Admission Test** will have 30 multiple choice questions. There will be a few questions that will test analytical ability. The remaining questions will be from Economics (Undergraduate level), Statistics and Basic Mathematics.
- In the entrance exam, students will be penalized 0.25 marks for every incorrect answer, whereas a correct answer will earn 1 mark. In case of a tie with respect to marks received, preference will be given to candidates with fewer incorrect answers.

## Syllabus for Entrance Examination:

- **Syllabus for Masters Entrance Examination:**

**Mathematics and Statistics:** Permutations and Combinations. Sets and Relations, Functions, Limits, Continuity, Differential and Integral Calculus. Unconstrained and Constrained Optimization. Descriptive Statistics: Measures of Central Tendency, Dispersion, Skewness and Kurtosis. Probability Theory, Sampling, Estimation, Inference and Hypothesis Testing

**Economics:** Theory of Consumer and Producer Behaviour; Market Structures: Perfect Competition, Monopoly and Oligopoly, General Equilibrium. Basic Models of International Trade: Ricardian Model and Hecksher Ohlin Model, National Income Accounting, Aggregate Demand and Aggregate Supply.

## Department Faculty

- **Shraman Banerjee** (Assistant Professor)  
Ph.D. (Southern Methodist University)  
Specialization: Micro Economic Theory; Mechanism Design.
- **Trishita Ray Barman** (Assistant Professor)  
Ph.D. (Indian Statistical Institute)  
Specialization: Growth Theory, Public Economics
- **Shampa Bhattacharjee** (Assistant Professor)  
Ph.D. (University of British Columbia)  
Specialization: Development Economics, Health Economics, Political Economy
- **Partha Chatterjee** (Professor & Head of the Department)  
Ph.D. (University of Minnesota)  
Specialization: Macroeconomics, International Economics.
- **Arka Roy Chaudhuri** (Assistant Professor)  
Ph.D. (University of British Columbia)  
Specialization: Economics of Education; Development Economics.
- **Ashokankur Datta** (Assistant Professor)  
Ph.D. (Indian Statistical Institute)  
Specialization: Environmental Economics, Development Economics
- **Kurt Horner** (Assistant Professor)  
Ph.D. (University of California, Irvine)  
Specialization: Macroeconomics; Industrial Organization.
- **Rajat Kathuria** (Dean, School of Humanities and Social Sciences; Professor) Ph.D. (University of Maryland) Specialization: Regulation and Competition Policy
- **Abhimanyu Khan** (Assistant Professor)  
Ph.D. (Maastricht University)  
Specialization: Applied Microeconomic Theory
- **Nirvana Mitra** (Assistant Professor)

Ph.D. Stony Brook University  
Specialization: International  
Macroeconomics

- **Anup Pramanik** (Assistant Professor)  
Ph.D. (Indian Statistical Institute)  
Specialization: Game Theory, Mechanism Design
- **Ram Ranjan** (Associate Professor)  
Ph.D. (Penn State University)  
Specialization: Environmental Economics; Development Economics
- **Jaideep Roy** (Professor) Ph.D.  
(Universidad Carlos III de Madrid)  
Specialization: Microeconomics; Game  
Theory
- **Gitanjali Sen** (Associate Professor)  
Ph.D. (University of Missouri-Columbia)  
Specialization: Applied Microeconomics; Development Economics
- **Suchishmita Tarafdar** (Associate Professor)  
Ph.D. (Arizona State University)  
Specialization: Macroeconomics, Theory of Optimization.

**LAST DAY FOR SUBMITTING APPLICATION:**

**July 4, 2021**

**TENTATIVE DATE OF ENTRANCE EXAM:**

**July 11, 2021**

**CONTACT INFORMATION:**

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