

Indian Institute of Technology Roorkee
Department of Humanities and Social Sciences

M.Sc. Economics (Two Year Programme)

Programme Overview

This programme will be of particular interest if one envisages a career which calls for advanced analytical skills, draws on advanced knowledge of economics, and shall ensure exposure to contemporary and emerging economic policy issues at the national and international levels. The programme is unique as it would help the students to apply various economic principles, theories and models, and understand the technical foundations behind them. This would enable students to alter, amend, empirically test and adapt them to the changing economic environment.

Programme Features

The M.Sc. (Economics) programme will open a wide range of career options for students at national and international levels in different roles such as academicians, economic and financial advisors, researchers and consultants, policy analysts and developers, social entrepreneurs, etc. The programme would offer the students to:

- Develop a firm foundation in core economics, and help them to gain an insight into the possibilities of research-focused roles;
- Generate skills in public policy development for employability as policy analysts, advisors and developers;
- Build expertise in data analytics and simulation techniques for solving economic problems as analysts and consultants;
- Inculcate the skills to deal with the emerging issues and challenges in the domain of economic and social development;
- To train students for academic excellence as teaching and research faculty

Admission Eligibility:

Minimum qualification for admission to M.Sc. (Economics) programme include one of the following degrees or their equivalents: B.Tech./B.E./B.Sc.(PCM)/B.Stat./B.A./B.Com (with mathematics as one of the subjects) with at least First Division. The applicant must have studied mathematics at the higher secondary level.

No. of Proposed Seats: 30

Mode of Admission

To apply for admission to M.Sc. Programme, a candidate is required to qualify in the JAM (Joint Admission Test) for M.Sc. conducted by IITs. Admission will be based on merit of the candidate in the written examination followed by an interview. The written test will focus on analytical, verbal and mathematical abilities. Candidates appearing for their final degree examination shall also be eligible to appear for the admission tests. However, their admission will be provisional and

subject to securing first division in their bachelor's degree examination. Reservation of seats will be as per the Government of India norms.

Programme Duration

The M.Sc. (Economics) programme would be a two-year full-time programme, with each year comprising the autumn and spring semesters with complete programme spread over total of four semesters.

Programme Structure

M.Sc. Programme structure shall be according to minimum and maximum credit requirements in each semester. In each semester, the student shall require to fulfill maximum of 18-22 credits. Courses may be of different credits ranging from 2 to 4. In the first year, the following core courses: Microeconomics-I and II, Macroeconomics-I and II, Mathematics for Economists, Development Economics, Basic Econometrics, International Economics, Money, Banking & Financial Markets, and Environmental Economics would be offered. In the second year, students need to take additional compulsory courses viz., Advanced Econometrics, Public Policy: Theory and Practice, among others.

In addition, the programme shall offer six elective courses. The list of elective courses would depend upon the major specialization opted by the students in the second year. The degree programme would offer the following major specializations:

- **Public Policy**– helps the students to understand the forces that shape the domestic and international economic policy environment. The courses to be offered, among others, include Public Finance, Energy Economics, Economics of Climate Change, Economics of Policy Evaluation, etc.
- **Development Economics**-provides students with a strong foundation to understand the economic, political and social dimensions of development studies. The major includes the courses like Topics in Agricultural Economics, Economics of Health, Industrial development, Topics in Growth theory, Economics of Labour, etc.
- **Financial Economics**- provides training to students with the application of economic principles in financial practices. The courses to be offered in this major includes Time Series Econometrics and Forecasting, International Finance, Quantitative Methods for Finance, Corporate Finance, Financial regulation and supervision, International Monetary Systems, etc.

The programme would offer a Masters' Project of 10 credits which would inculcate the capacity to effectively utilize economic principles and theories to understand national and international economic development issues. The work for the M.Sc. project would spread over Semester III and IV, and the project grades be distributed equally between the two semesters.

Programme Evaluation

The programme course(s) evaluation would be based on mid-term, end-term and coursework including seminar presentations, group discussions, term papers and summer internship as per institute evaluation scheme.

Total Credits: 76—80 (as per other M.Sc. programmes of the Institute)

Career Prospects

Careers open to students who successfully complete the M.Sc. Economics degree include economic advisory at government and semi-government departments, financial analysts and advisors to national and international financial institutions, data analysts and researchers as well as consultancy. In addition, the M.Sc. Economics programme may also offer a route into further study at the Ph.D. level at various international academic institutions. The institute placement and training Centre can arrange campus placements by prospective employers from:

Financial Services-Reserve Bank of India, American Express Bank, HSBC Bank, ICICI Bank, Roulac Global Investments, National Institute of Securities Markets (NISM), Fidelity Investments, Indian Credit Rating Association (ICRA), Industrial Development Bank of India (IDBI), Iflex Solutions, National Commodities & Derivatives Exchange Ltd., etc.

Government Departments-Planning Commission (NITI Ayog), Ministry of Finance, Indian Council for Social Science Research (ICSSR), etc.

Research and Consultancy-Crisil Research, Deloitte, Ernst & Young and PwC, Institute for Financial Management and Research, NCAER, etc.

International Agencies- Economic advisor and experts to World Bank, Asian Development Bank, International Monetary Fund, OECD, etc.

Development- Social sector, NGOs, MFIs, NABARD, etc.

