Today’s economist is a trained and educated professional whose career may range between academe, with its teaching and research, and private or public administration, with its research, direction, and advising. As a social scientist, the economist seeks to understand, among other things, economic fluctuations, the determinants of growth and decline, and international trade and exchange relations. In both national and international service, the economist’s function is to analyze economic and social interrelations in order to better recommend and promote institutional objectives. The field offers extensive career possibilities.

The economics faculty is involved in active research, using New York University’s excellent computer facilities and libraries. Many faculty members are also associated with research institutes. The C. V. Starr Center for Applied Economics, directed by Professor Jonathan Eaton, bridges the gap between academic research and decision making in business and government. It analyzes issues of important economic and social consequence and disseminates the results of its research to the business community through a series of conferences, monographs, seminars, and research papers.

CAREER PREPARATION
The undergraduate program in economics prepares students in three ways. First, it provides a thorough foundation for those who wish to continue advanced study in the field of economics. Second, the curriculum prepares students for the business world by providing them with both analytic skills and an understanding of underlying business trends. Finally, the economics program provides an excellent background for those interested in law, politics, international affairs, journalism, and other areas. Students may take either the policy concentration or the theory concentration under the economics major.

ALTERNATE CONCENTRATIONS IN ECONOMICS MAJOR
In order to allow students to select an approach to the study of economics that is more suitable to their personal aptitudes and interests, a major in economics can be taken in either of two concentrations as described below. For further information, visit the department’s Web site at www.econ.nyu.edu.

Policy Concentration
The policy concentration is intended for the student who is primarily interested in the application of economic principles to understanding current events, economic institutions, and the formation of government policy. This concentration is particularly well-suited for students planning careers in business, law, public policy, or any other field in which a thorough understanding of economic problems and the economic way of thinking would be beneficial. This is the concentration that most business school students prefer.

Policy Core (16 Points)
C31.0010 Intermediate Microeconomics
C31.0012 Intermediate Macroeconomics

Plus two 200- or 300-level courses in economics, although at least one course should be at the 300 level.
Courses

Theory Concentration

The theory concentration is intended for the student who wishes to begin the formal study of economic reasoning with an emphasis on mastering the analytical tools. This concentration relies on a higher level of abstraction and focuses on techniques of economic analysis rather than on the understanding of specific economic problems or institutions. It is particularly well-suited for students who intend to pursue a Ph.D. degree in economics, or those pursuing careers or higher degrees in highly quantitative fields such as finance. Students are required to complete three semesters of calculus through V23.0123. Students are urged to talk to department advisers concerning additional mathematics courses that would be useful.

Students following the theory track should not take V31.0001, V31.0002, or C22.0103. Instead, they should take V31.0005, V31.0006, and C31.0020.

Theory Core (16 Points)
C31.0011
Microeconomic Theory and Analysis
C31.0013
Macroeconomic Theory and Analysis
C31.0266
Introduction to Econometrics or equivalent course

Plus one 300-level course from the theory concentration.

Special care must be taken to be sure that no course is taken without the proper prerequisites.

Special note: Because economics is taught at both the Stern Business School and at the College of Arts and Science (CAS), special conditions apply; students should note the following circumstances in particular:
1. Students may fulfill their free elective requirements in business or liberal arts by taking up to three courses (12 points) in economics.
2. Stern students contemplating a major in economics should discuss their intentions with their adviser by the end of their freshmen year and at the very latest by the end of their sophomore year. Students should also meet with the economics department adviser. The reason for this is that the course sequence is highly structured with courses each year feeding into courses in subsequent years as prerequisites.
3. The CAS requirement for an economics major is ten courses, which includes the two principles courses and statistics that are required of all Stern students. Of the remaining seven courses, Stern students are required to take the four courses listed in the economics core indicated above. The remaining three courses can be met by Stern students in the following manner:
   - Double major with international business.
   - Double major in another Stern department, especially finance.
   - If the student is a major in economics only, see the departmental adviser for advice on course selection.
4. Because there is significant overlap in content between certain courses in economics and in some other Stern departments—most notably finance, international business, and statistics—a student is not allowed to take two similar courses and have them both count toward the major(s). These courses are indicated in the bulletin’s course listings.

Changing Concentrations

Transferring between concentrations after students have completed any of the intermediate theory courses is very difficult, more so in going from the policy to the theory concentration. Students who are unsure about what concentration to take should seek departmental advice before beginning their major.

Honors Program

The department offers an honors program in economics for qualified students. A 3.5 overall grade point average (GPA) and a 3.5 GPA in economics courses are required. Students are required to complete an econometrics course: C31.0266, Econometrics (theory concentration); C31.0380, Topics in Econometrics (policy concentration); C22.0017, Regression and Multivariate Data Analysis; or an approved alternative. Honors students are expected to complete up to three liberal arts courses (12 points) in economics. Honors students are expected to complete C31.0410, Honors Tutorial, or an approved alternative.

In the course descriptions that follow, course titles may be preceded by the designation P, E, or T. P represents courses for the policy concentration; T, for the theory concentration. The designation E indicates that the course may be given in either concentration in alternate semesters or in alternate years. No designation indicates that a course may be taken for either concentration. With permission of the director of DUGS, students in one concentration may take courses in the other concentration; the major constraint is that such students must have the required prerequisites to enter the courses. For courses labeled E, students may not take the same course in different concentrations.

Economics course numbers fall into four major groups. Core courses are numbered below 0100. Courses numbered 0100 to 0199 require no pre-requisites. Elective courses numbered 0200 to 0299 require the first-year core courses as prerequisites. Elective courses numbered 0300 and above require the second-year core courses as prerequisites.

FIRST-YEAR CORE COURSES
P Economic Principles I
V31.0001 4 points.
Prerequisite: Precalculus or equivalent.

This course focuses on the economy as a whole (the “macroeconomy”). It begins with the meaning and measurement of important macroeconomic data (on unemployment, inflation, and production), then turns to the behavior of the overall economy. Topics include long-run economic growth and the standard of living; the causes and consequences of economic booms and recessions; the banking system and the Federal Reserve; the stock and bond markets; international exchange rates and the impact of global economic events; and the role of government policy.

P Economic Principles II
V31.0002 4 points.
Prerequisite: Precalculus or equivalent.

This course focuses on individual economic decision makers—households, business firms, and government agencies—and how they are linked together. The emphasis is on decision making by households and firms, and how these decisions shape our economic life. This course explores the different environments in which businesses sell their products, hire workers, and raise funds to expand their operations; the economic effects of trade between nations; and the effects of various government policies, such as minimum wage legislation, rent controls, antitrust laws, and more.

ECONOMICS 29
T Introduction to Economic Analysis
V31.0005 4 points.
Identical with V31.0005. Open to freshmen and sophomores only. Corequisite: V63.0121.
This course introduces some of the important tools economists use to solve problems, provides examples of how they are used, and prepares students for subsequent course work in the theory concentration. Topics include game theory, decision making by households and firms, competitive markets, long-run economic growth, disequilibrium, and short-run economic fluctuations.

T Mathematics for Economists
V31.0006 4 points.
Identical with V31.0006. Open to freshmen and sophomores only. Corequisite: V63.0121.
This course is specifically designed to provide the appropriate mathematical tools for study in the theory concentration. Examples and motivation are drawn from important topics in economics. Topics include elementary set theory and the abstract notion of a function, Cartesian products, convex sets and concave functions, differential calculus and partial derivatives, integration and the fundamental theorem of calculus, first- and second-order conditions for a maximum, implicit functions, and constrained optimization.

SECOND-YEAR
Core Courses:
P Intermediate Microeconomics
C31.0010 4 points. Fall, spring and summer.
Identical with V31.0010. Prerequisite: V31.0002 or equivalent.
Examines the manner in which producers, consumers, and resource owners acting through the market determine the prices and output of goods, the allocation of productive resources, and the functional distribution of incomes. The price system is seen as a network of interrelated decisions, with the market process serving to communicate information to decision makers.

T Microeconomic Theory and Analysis
C31.0011 4 points.
Identical with V31.0011. Prerequisites: C31.0005, C31.0006, and V63.0121, or equivalent.
Rigorous examination of consumer choice, profit-maximizing behavior on the part of firms, and equilibrium in product markets. Topics include choice under uncertainty, strategic interactions between firms in noncompetitive environments, intertemporal decision making, and investment in public goods.

P Intermediate Macroeconomics: Business Cycles and Stabilization Policy
C31.0012 4 points. Fall, spring and summer.
Identical with V31.0012. Prerequisite: V31.0001 or equivalent.
Study of aggregate economic analysis with special attention paid to the determination of the level of income, employment, and inflation. Critically examines both the theories and the policies associated with them.

T Macroeconomic Theory and Analysis
C31.0013 4 points.
Identical with V31.0013. Prerequisites: C31.0005, C31.0006, and V63.0121, or equivalent.
Study of aggregate economic analysis, with special attention to the determination of the level of income, employment, and inflation. Critically examines both the theories and the policies associated with them. This course involves more formal analysis than that used in C31.0012.

T Analytical Statistics
V31.0020 4 points.
Prerequisite: V63.0121. Restriction: Not open to any student who has taken V31.0018.
Introduction to statistical reasoning. This is a more analytically oriented course than V31.0018 and prepares the student for Introduction to Econometrics, V31.0266. Topics covered include descriptive statistics, calculation of moments, probability theory, an introduction to distribution theory, and an introduction to inference. Laboratory sessions enable the student to run a wide variety of computer experiments and to simulate all distributions that are discussed as well as to experiment with a wide variety of statistical procedures.

ELECTIVE COURSES:
200 LEVEL

P Economic History of the United States
C31.0205 4 points.
Identical with V31.0205. Prerequisites: V31.0001 and V31.0002, or C31.0005, or equivalent. This course is recommended for all majors. Analytic survey of the structure of the U.S. economy. National income and its distribution; population and land; capital accumulation and development of financial institutions; labor and labor unions; technological change; the market, both domestic and foreign; and the economic effects of government policy.

P Ethics and Economics
C31.0207 4 points.
Identical with V31.0207. Prerequisite: V31.0002 or C31.0005.
Study of the interface between ethical and economic theories. Specific topics covered include a brief overview of various ethical ideas, an analysis of the ethical presuppositions of modern economic theory (especially welfare economics), utilitarian ethics, the moral status of free exchange, the ethical implications of imperfect knowledge between bargaining parties, cost-benefit analysis and human rights, the economic content of the “general welfare,” and laisser-faire.

P Urban Economics
C31.0227 4 points.
Identical with V31.0227 and V99.0310. Prerequisite: V31.0002 or C31.0005.
The city as an economic organization. Urbanization trends, functional specialization, and the nature of growth within the city; organization of economic activity within the city and its outlying areas, the organization of the labor market, and problems of urban poverty; the urban public economy; housing and land-use problems; transport problems; and special problems within the public sector.

P Money and Banking
V31.0231 4 points.
Prerequisite: V31.0001 or C31.0005.
Money supply; banking as an industry; banks as suppliers of money; the Federal Reserve System and monetary control; monetary theory; and contemporary monetary policy issues.

P Poverty and Income Distribution
C31.0233 4 points.
Identical with V31.0233. Prerequisite: V31.0002 or C31.0005.
Defines poverty and welfare. Analyzes who the poor are, why some people are rich and others poor, equality of opportunity, income and status, inequality, trends in the degree of
inequality, government’s role in income distribution, and international comparisons of inequality.

**P Gender and Choices**  
C31.0252 4 points.  
Identical with V31.0252 and V97.0252. Prerequisite: V31.0002 or C31.0005.  
Examines important economic influences on decisions women make concerning labor force participation and family, the theory of labor market behavior and discrimination, as well as public policy options.

**P Economics of the Law**  
C31.0255 4 points.  
Identical with V31.0255. Prerequisite: V31.0002 or C31.0005.  
Introduction to economic analysis of a variety of legal issues. Explores the relationship of legal institutions and laws to economic efficiency and social goals (such as justice). Topics are chosen from among the following: economics of property rights, externalities and environmental control, administrative processes, crime, contracts and liability, public utility and antitrust regulations, and individual rights and discrimination.

**ELECTIVE COURSES:**  
**300 LEVEL**

**T Strategic Decision Theory**  
C31.0310 4 points.  
Identical with V31.0310. Prerequisite: C31.0011.  
Introduction to noncooperative game theory. Focuses on a rigorous development of the basic theory with economic applications such as competition among oligopolists, how standards are set, auction theory, and bargaining. The formal topics include games in strategic form, Bayesian games, and games in extensive form.

**P Industrial Organization**  
C31.0316 4 points.  
Identical with V31.0316. Prerequisite: C31.0010 or C31.0011.  
Analysis of the structure, conduct, and performance of firms and industries. Involves the development of a theoretical basis for evaluating performance. Analysis of competition as a state-of-affairs versus competition as a process. The effects of advertising, economic concentration, and innovation on prices and production. Overall survey of contemporary antitrust law and economics.

**T Market Structure and Performance**  
C31.0317 4 points.  
Identical with V31.0317. Prerequisite: C31.0011.  
This course is designed to familiarize students with a modern approach to industrial organization economics. This modern approach relies extensively on the use of game-theoretic tools to model strategic market behavior and on extensive use of econometric methods for testing hypotheses regarding firm conduct and market performance. In particular, the course analyzes profit-maximizing business strategies of firms with market power as well as strategic interactions among firms in various types of imperfectly competitive markets. It addresses both static modes of competition as well as dynamic competition in research and development and product design. Also examined is the scope of effective public policies designed to improve market performance. Mathematical-based models are used throughout the course to develop the relevant concepts and test the pertinent theories of firm behavior.

**P Economic Development**  
C31.0323 4 points.  
Identical with V31.0323. Prerequisite: C31.0012 or C31.0013, and C45.0011.  
This course studies the problem of economic underdevelopment, with special reference to the countries of Asia, Latin America, and Africa. The building blocks of economic theory are used to understand the historical experiences of these countries. Macroeconomic topics covered include economic growth, income distribution and poverty, with particular emphasis on the concept of underdevelopment as a circular, self-reinforcing trap. Microeconomic topics include the study of particular markets that are especially relevant to developing countries: those for land, labor, and credit. Notions of market fragmentation, limited information, and incentive problems receive emphasis. The course ends with international issues: trading patterns, capital flows, and global financial crises are studied from the viewpoint of developing countries.

**T Topics in the Global Economy**  
C31.0324 4 points.  
Identical with V31.0324. Prerequisites: C31.0012 or C31.0013, and C45.0011.  
This course covers special topics in the context of a global economy: fiscal and monetary policy under alternative exchange rate regimes; international transmission mechanisms; barriers to capital mobility; international policy coordination; optimum currency areas, customs unions, and free trade areas; multilateral trade; trade liberalization policies; and the role of the World Bank and of the IMF.

**E Economics of Energy and the Environment**  
C31.0326 4 points.  
Identical with V31.0326. Prerequisite: C31.0010 or C31.0011.  
Economic analysis of major policy issues in energy and the environment, both domestic and international. Emphasis is on market solutions to various problems and market limitations in the allocation of environmental resources. Energy issues focus on OPEC and world oil markets, with attention to reducing oil import vulnerability; taxation and regulation of production and consumption; conservation of natural resources; and the transition to alternative energy sources. Environmental issues include policies to reduce pollution. Substantial attention is paid to global warming caused by consumption of fossil fuels.

**T International Trade**  
C31.0335 4 points.  
Identical with V31.0335. Prerequisite: C31.0011.  
This course examines theories of international trade, as well as related empirical evidence. Topics include the relationship between trade and economic growth, the theory of customs unions, international factor movements, trade between unequal partners, and trade under imperfect competition.

**T International Finance**  
C31.0336 4 points.  
Identical with V31.0336. Prerequisite: C31.0013.  
Financial and macroeconomic issues in international economics, the balance of payments, gold and other assets in international portfolios, exchange rate determination, problems of simultaneous achievement of internal and external policy goals, and interdependence of countries’ macroeconomic policies.

**T Economics of Forward, Futures, and Options Markets**  
C31.0337 4 points.  
Identical with V31.0337. Prerequisite: C31.0011.  
Restriction: cannot be taken for credit in addition to C15.0043.  
Provides an understanding of the operation and economic role of contracts in forward, futures, and options markets in an economic environment of increased price uncertainty. Includes government regulation of these markets, the role of the hedger and the speculator, and theories of price movements relevant to the markets.

**P Ownership and Corporate Control in Advanced and Transition Economies**  
C31.0340 4 points.  
Identical with V31.0340. Prerequisites: C31.0010 or C31.0011, and C22.0103, or equivalent.  
This course discusses the conceptual foundations and empirical evidence concerning the effects of private ownership on corporate performance. The corporate control mechanisms in the United States, Germany, Japan, and
the emerging market economies of Eastern Europe and the former Soviet Union are reviewed. Particular attention is paid to the role of capital markets (takeovers and other shareholder control devices), banks, and other financial institutions, and various corporate institutions (such as boards of directors and shareholder meetings) in facilitating or hindering corporate control and the efficient allocation of resources.

T Political Economy
C31.0345 4 points.
Identical with V31.0345. Prerequisite C31.0011.
This course introduces the emerging field of formal political economy. The variety of ways in which economists and political scientists think about political science and the interplay of political science and economics are analyzed. The first part of the course focuses on the formal modeling of political behavior and political institutions. In this part, the theory of social choice (how groups of rational individuals make decisions) and collective action (how groups of rational individuals act together) are analyzed. The second part of the course discusses the connection between politics and economics and investigates the effect of political variables on the determination of economic outcomes. Some questions that are answered include: How do special groups of individuals enhance their well-being by political action? What is lobbying? What is the effect of contributions on political outcomes?

P Labor Economics
C31.0351 4 points.
Identical with V31.0351. Prerequisite C31.0010 or C31.0011.
Analyzes the functioning of the labor market in both theoretical and statistical terms. Examines the determinants of wage and employment levels in perfect and imperfect labor markets, including the concept of education and training as human capital. Models of labor market dynamics are also examined, including those of job search and matching. The role of public policy in the functioning of labor markets is highlighted throughout.

P Public Economics
C31.0353 4 points.
Identical with V31.0353. Prerequisite C31.0010 or C31.0011.
This course, in alternate years, stresses policy implications and the development of the theory. Analysis of government economic policies and behavior. Normative and positive economics; the fundamental welfare theorems. What goods should the government provide (public goods)? When should the government tax private behavior (externalities)? Income redistribution and the welfare program. Who pays the tax (tax incidence)? The role of debt policy. On what should taxes be levied (optimal taxation)?

P Experimental Economics
C31.0360 4 points.
Identical with V31.0360. Limited to 20 students. Prerequisite C31.0010 or C31.0011.
Experimental economics is predicated on the belief that economics, like other sciences, can be a laboratory science where economic theories are tested, rejected, and revised. This course reviews the methodology of conducting such laboratory experiments and investigates the use of experiments in a wide variety of fields. These include competitive markets, auctions, public goods theory, labor economics, game theory, and individual choice theory. The course functions as a research seminar in which students present their work as it progresses during the semester. Students also get exposure to the experimental laboratory in the Department of Economics and to the research performed there.

T Advanced Micro Theory
C31.0365 4 points.
Identical with V31.0365. Prerequisite C31.0011. For advanced undergraduates who have taken the necessary preparatory courses in economics and mathematics. This course is designed to introduce students to some of the main model-building techniques that have been developed by microeconomics. Three basic topics are covered. The first topic is the static theory of consumer behavior both in a certain world and in an uncertain world. The second topic is the theory of perfect competition. The third topic is the theory of dynamic optimization. In addition to the coverage of the economics, the advanced mathematical techniques that are needed to understand the material are reviewed.

P Topics in Applied Economics
C31.0370 4 points.
Explores economic issues of economic policy using the tools learned in the intermediate micro- and macroeconomic courses. Focuses on a particular issue each term.

T Topics in Economic Theory
C31.0375 4 points.
Explores issues in economic theory using the tools learned in macro- and microeconomics. Focuses on a particular issue each term.

P Topics in Econometrics
C31.0380 4 points.
Identical with V31.0380. Prerequisites: C31.0010, C31.0012, and C22.0103.
Examines a number of important areas of econometrics. The topics covered include identification and estimation of simultaneous equations models; model specification and testing; estimation of discrete choice models; and analysis of duration models. In addition to covering the relevant theoretical issues, the course includes the application of these methods to economic data.

HONORS AND INDEPENDENT STUDY

E Independent Study
Prerequisites: C31.0010, C31.0012 or C31.0011, and permission of the director of undergraduate studies. No more than a total of 8 points may be taken of independent study. The student engages in intensive independent study of an important economic topic under the direction of a departmental faculty member. The results of the study are embodied in a report of a type required by the instructor.

E Honors Thesis
C31.0400 4 points.
Identical with V31.0400. Prerequisites: C31.0010 or C31.0011, C31.0012 or C31.0013, and permission of the director of undergraduate studies. Normally, the thesis is written in the senior year, but students are advised to choose their topic and faculty adviser by the beginning of the senior year at the latest. For description, see Honors Program, above.

E Honors Tutorial
C31.0410 4 points.
Identical with V31.0410. Open only to honors students. The objective of the course is to train students to write on economic topics and perform economic analysis efficiently and quickly as well as to develop rhetorical skills. Once a week, two students each present a paper on an assigned topic that has been distributed previously to the other students. The students not presenting a paper receive the results of the study under the direction of an honor student who has been recommended by the instructor. Each paper is to be revised and submitted to the instructor with a cover sheet that indicates how the student dealt with each of the criticisms.