

# ECONOMICS

The economics curriculum is designed to serve a variety of student educational objectives. Emphasis is placed on understanding economic behavior and institutions and the development of specific analytical skills. An economics major is especially appropriate for students interested in careers within business, accounting, law, government, or teaching.

Students majoring in economics take a combination of courses suited to their particular interests. Major requirements are flexible and, with department approval, can be modified to fit the program interests of individual students. Liberal provisions are made for the individual student, either as a major or as a non-major, to choose electives from an extensive list of special interest courses.

## Major Requirements

The major in economics requires ten courses distributed as follows:

### 1. Core Requirement (three courses):

- **Economics 50. Principles of Economic Analysis**
- **Economics 101. Intermediate Microeconomics**
- **Economics 102. Intermediate Macroeconomics**

Students should complete the core requirement prior to taking elective courses in the major. Some advanced courses require completion of the entire Core Requirement as a prerequisite for enrollment. Both Economics 101 and 102 require completion of basic calculus at the level of *Mathematics 30. Calculus I*, or higher.

### 2. Statistics Skill Requirement

One course is required in basic statistics and empirical methods. This requirement is usually met by completing *Economics 120. Statistics*. With department approval, students may meet the Statistics Skill Requirement by showing proficiency through another appropriate statistics course (or courses). The Statistics Skill Requirement should be completed concurrently with the Core Requirement.

Students completing an economics-mathematics dual major fulfill the statistics skill requirement by completing *Mathematics 151. Probability*, and *152. Statistical Inference*, or *158. Applied Statistics*.

### 3. Electives Requirement

**Six elective courses in economics** must be completed beyond the Core Requirement and Statistics Skill Requirement.

Elective courses are arranged in two categories according to prerequisites: *Level One electives* require only Economics 50 as a prerequisite; *Level Two electives* require at least Economics 101 or 102. Economics-accounting courses 86 through 160 (except for 151 and 157) are Level One elective courses for economics majors.

No more than two Level One courses may be counted for completion of the Electives Requirement. Students must take at least four of their electives at CMC.

## Special Options for Majors

A number of special program options are available within the framework of the major requirements listed above. These special program options and requirements include:

### **Dual Majors**

Students with a dual major including economics must complete at least eight economics courses, distributed as follows:

1. **Core Requirement** (see above)
2. **Statistics Skill Requirement** (see above)
3. **Electives:** four or more economics elective courses. Students with a dual major in economics must take at least three Level Two electives. At least two of the elective courses must be taken at CMC.

Please note the restrictions on honors in the major for students with a dual major in “Honors in Economics” below. For further information on dual majors and the requirements for the other field of study of the dual major, please check the appropriate sections of this catalog.

### ***Economics-Mathematics Dual Major***

This dual major emphasizes application of mathematical methods for economic analysis. The requirements for the economics portion of the economics-mathematics dual major are:

1. **Core Requirement** (see above)
2. **Economics 125. Econometrics I**
3. **Electives:** four or more economics courses of which at least three must be chosen from Level Two elective courses.

For the requirements for the mathematics portion of the dual major, please consult the mathematics section of the catalog.

### ***Honors in Economics***

Requirements for honors in economics are:

- Completion of a major in economics
- A grade point average of 10.50 or better in the major at the time of graduation
- Completion of *Economics 180. Seminar in Research Method*
- Completion of a senior thesis on a subject in economics under the direction of a member of the CMC Economics department. The thesis must reflect a superior understanding of economic analysis as determined by the student’s reader and Economics 180 instructor. For further information, contact your economics advisor or the department chair.

Students completing a thesis in the spring and interested in honors in economics must submit a *separate copy of their thesis* to the chair of the economics department *one full week prior* to the College deadline for senior thesis.

Students with a *dual major* in economics who wish to be considered for honors in economics will only receive honors if they:

- have completed all requirements for a *full major* in economics and are granted honors, or
- qualify and receive honors in *both fields* of their dual major. See “Honors in the Major” for details.

### ***Internship in Economics***

For information on summer internships in economics, see “Summer Internship Program in Economics” in “Special Programs.”

### **General Education Requirement in Economics**

The general education requirement in economics is met by *Economics 50. Principles of Economic Analysis*.

## Economics Courses at the Other Claremont Colleges

With the prior written permission of the department chair, students may elect to count economics courses taken elsewhere in Claremont either as general electives or as courses fulfilling major requirements. Such substitutions are made in lieu of economics courses offered at Claremont McKenna College.

### Study Abroad

All CMC students have the opportunity to apply to study abroad during the junior year. Students planning to study economics abroad should consult with the chair of the Economics department to determine which off-campus courses will be accepted by the department. The department does not accept study abroad courses for any of the Core Requirement courses. Study abroad courses normally count as Level One elective courses and no more than two (one for dual majors) such courses may count toward the major.

### The Faculty

Professors: Arndt (on leave, second semester), Ascher, Burdekin (Chair), Hess, Massoud (on leave, first semester), Mulherin (on leave, AY), J. Smith, Teeples, Willett, and Wright; Visiting Professor: Mintz; Associate Professors: Blomberg, W. Brown, Helland (on leave, AY), Keil, Meulbroek, and Rosett; Visiting Associate Professor: Shin; Assistant Professors: Antecol (on leave, second semester), Harbaugh (on leave, AY), Ward-Batts, and Weidenmier; Visiting Assistant Professors: Ashenmiller, Ito, Pedace, and Vahey; Senior Lecturer: Taylor; Visiting Senior Lecturer: Rajan

## Courses

### *Core Courses*

#### **50. Principles of Economic Analysis.**

An introduction to modern economic analysis with emphasis on resource allocation and national income. Stresses the fundamental interdependence of all forms of economic activity in terms of specialization, exchange, and competition. (This course fulfills the general education requirement in economics.) First and second semester. Staff

#### **101. Intermediate Microeconomics.**

An analysis of the determination of price and output under various market conditions, from competition to monopoly. Theories of economic choice are applied to consumers, producers, and resource owners. Techniques of partial equilibrium analysis are stressed. Prerequisites: Economics 50 and some calculus. First and second semester. Staff

#### **102. Intermediate Macroeconomics.**

The theoretical background for understanding macroeconomic problems and policy options. Topics include evolution of macro thought; the IS-LM system and some alternatives; theories of consumption, investment, and money; unemployment; inflation; interest; monetarism; rational expectations; and supply side policies. Prerequisites: Economics 50 and some calculus. First and second semester. Staff

### *Elective Courses by Field*

#### • *Economic Theory*

#### **104. Foundations of Political Economy.**

An examination of the classical and contemporary philosophical foundations of political economy - that is, the prescriptive study of the interaction between economics and politics. Prerequisites: Economics 50 and Government 20. Also listed as Government 166. Second semester. Wright and Nichols

#### **109. Ethics, Economics, and Public Policy.**

A study of moral and economic theories as they relate to public policy. Topics may include the moral and economic implications of governmentally sponsored universal health care, welfare reform, progres-

sive taxation and the redistribution of wealth and/or income, and equality of opportunity. Also listed as Philosophy 196. Prerequisite: Economics 50. First semester. Wright and Kucheman

- *Economic History and Comparative Systems*

**114. Development of the American Economy.**

An analysis of the development of the American economy from colonial times to the present. Special emphasis is placed on the interaction of technical and institutional change. The course focuses on specific topics, and students write several brief analytic papers. Prerequisite: Economics 50. (Not offered in 2003-2004.)

- *Quantitative Methods*

**120. Statistics.**

Introduction to probability theory and the logic of statistical inference with applications to economics and business. Topics include measures of central tendency and dispersion, point and interval estimation, hypothesis testing, correlation, decision theory, and regression analysis. Prerequisites: Mathematics 30, and Economics 50. First and second semester. Staff

**125. Econometrics I.**

An introduction to the application of multiple regression techniques for testing and evaluating economic theory. Topics include hypothesis testing, model specification, heteroskedasticity, and serial correlation. Extensive use is made of computers for data handling and estimation. Prerequisites: Economics 101, 102, and 120, or permission of instructor. First semester. Keil. Second semester. Ito

**126. Econometrics II.**

An advanced course in the application of econometric techniques in economics and finance. Topics include simultaneous equation models, time-series and cross-section data analysis, maximum likelihood estimation, and forecasting. Prerequisite: Economics 125. (Not offered in 2003-2004.)

**129. Game Theory.**

Introduction to economics decision-making in strategic settings. Emphasis on applications in bargaining, industrial organization, international economics, labor economics, macroeconomics, regulation, and finance. This course is not open to students who have completed Mathematics 188, Game Theory. Prerequisites: Economics 101, 102, and 120. (Not offered in 2003-2004.)

- *Monetary, Fiscal, and Financial Economics*

**134. Corporate Finance.**

This course will serve as an introduction to various topics in financial economics. Some of the topics introduced will include the time value of money, valuation and yield determinations for various financial assets, risk and return, basic portfolio theory, financial options, and efficient markets theory. Students will be introduced to several computer based statistical packages and will be required to use these packages to analyze financial data. Prerequisites: Economics 101 and 120. First semester. Meulbroek. Second semester. Brown

**135. Money and Banking.**

An analysis of the role of commercial banks, the Federal Reserve, and financial intermediaries in the creation and control of money. The effect of monetary policy upon national aggregates is considered in the short- and the long-run. Prerequisites: Economics 101 and 102. First semester. Burdekin

**136. Practicum in Financial Institution Management.**

Course participants apply economic theory to the analysis of financial markets and the operation of a computer-simulated financial intermediary. Students learn to analyze financial statements, develop and implement asset/liability management strategies, and coordinate activities in management teams. Analysis of the operation of a simulated commercial bank is supplemented with analysis of actual financial intermediaries with the assistance of their officers. Students use spreadsheet programs and prepare and present written and oral reports. Prerequisites: Economics 86 and 101, or permission of instructor. (Not offered in 2003-2004.)

**137. Topics in Corporate Finance.**

An advanced treatment and analysis of financial decisions made by corporations. Topics covered include an introduction to capital budgeting, asset pricing models, determination of the cost of capital,

capital budgeting under uncertainty, capital structure, dividend policy, mergers and acquisitions, and risk management. Prerequisites: Economics 86, 101, 120, and 134. (Not offered in 2003-2004.)

**138. Current Issues in Money and Finance (with Practicum).**

Focuses on a number of major current issues in monetary and financial policy. Topics include the political and economic forces that stimulate inflationary pressures, the debate over the effects of fiscal deficits and strategies for conducting monetary policy in a world of financial innovations and international interdependence. Practicum component requires collaboration on a research project that will be orally presented to an appropriate outside mentor. Prerequisites: Economics 101, 102, and 120. Second semester. Burdekin

**139. Topics in Investments and Valuation.**

An advanced treatment and analysis of capital markets, financial instruments and portfolio theory. Topics covered include asset valuation, risk measurement and control, and portfolio design for large institutions. Portfolio simulations are used to test theories. Prerequisites: Economics 102 and 134. Computer background recommended. Second semester. Brown

• *International and Developmental Economics*

**140. The World Economy.**

A survey of international trade, financial markets and monetary relations, including their analytical foundations, empirical and institutional manifestations, and policy implications. Prerequisite: Economics 50. First semester. Willett

**141. International Economics.**

A survey of international trade theory and policy, open-economy macroeconomics, and international financial markets. Prerequisites: Economics 101 and 102. Second semester. Rajan

**142. Politics and Economics of Natural Resource Policy in Developing Countries.**

This seminar course addresses the question of how countries dependent on natural resources ought to husband these resources and invest the proceeds productively. It employs the policy sciences framework to explore the political and economic-policy challenges of minimizing the abuse of resource endowments due to mis-pricing, corruption, intra-governmental conflicts, and perverse governance arrangements. It examines why governments seem to abuse natural resources willfully, what forms of privatization hold promise for better resource use, what fiscal and governance arrangements are optimal for the relationship between government and state natural-resource agencies, and whether resource abundance is actually a "curse" rather than an advantage for a country's economic and political development. The cases will be drawn predominantly from Africa, Asia, and Latin America. Also listed as Government 132e. Prerequisites: Economics 101 and Government 20. Second semester. Ascher

**145. International Money and Finance.**

Presents basic elements of balance of payments and exchange rate theory and policy, open economy macroeconomics, international financial management, and the evolution of the international monetary system. Prerequisites: Economics 101 and 102. First semester. Rajan

**147. International Trade Theory and Policy.**

Advanced topics in international trade, covering major theoretical and empirical aspects of the international movement of goods, capital, and labor. The political economy of trade policy, with applications focusing on Japan and other Pacific Rim countries. Prerequisite: Economics 141. (Not offered in 2003-2004.)

• *Economic and Legal Organization*

**161. Sports Economics.**

An integrative economics course with a focus on professional and intercollegiate sports. The course builds on microeconomic theory of industrial organization, antitrust economics, labor economics, financial economics, and public finance. Specific topics include: organizational structure of sports leagues, tournament compensation, team production, the draft, salary compensation, endorsements, salary caps, player value, franchise value, and stadium finance. The course makes extensive use of economics journal articles, business cases, and antitrust cases. Prerequisites: Economics 101, 120, and at least two

of the following courses: Economics 86, 125, 165, 167, or 175. First semester. J. Smith

**164. Economics of Strategy.**

In a business economics setting, strategy is concerned with long-term “big picture” decision-making, including determining firm boundaries, evaluating the firm’s competitive environment, designing internal organization and compensation structure, and identifying the relation between strategy and organizational decisions. Besides exploring examples of strategic management decisions through case studies, the course develops a formal analytic framework for thinking about strategic management decisions based on recent developments in the fields of economics and strategy, including game theory.

Prerequisites: Economics 86 and 101. (Not offered in 2003-2004.)

**165. Industrial Organization.**

Covers the latest theories and empirical evidence concerning the organization of firms and industries. It compares the traditional structure-conduct-performance paradigm with recent advances based on microeconomic theory including transactions cost economics, game theory, strategic behavior, contestability, and information theory. The focus is on applying theories of industrial organization to common business practices and on evaluating U.S. antitrust policy toward these practices. Prerequisite:

Economics 101. Second semester. Staff

**167. Law and Economics.**

An analysis of the importance of law in the allocation of economic resources and of economics in the operation of the legal system. Topics include property and externalities, contracts, torts, criminal law, civil procedure, and the rationing of justice. Prerequisite: Economics 101. Second semester. Staff

**168. The Economics of Crime.**

A survey of economic models of criminal behavior and its deterrence. Topics include drug policy, the death penalty, gun control and victimless crime. Prerequisites: Economics 101 and 120. (Not offered in 2003-2004.)

• *Labor, Demographic, and Resource Economics*

**175. Labor Economics.**

This is an introductory survey of modern labor economics. The first part of this course develops simple models of labor demand and supply. These analytical tools are then used to analyze the determinants of earnings inequality, including issues such as human capital accumulation, labor market discrimination, unionization, and worker-firm contractual arrangements. Prerequisites: Economics 101 and 120. First semester. Antecol

**178. Economics of Population.**

Uses an economic perspective to analyze demographic change, including recent dramatic changes in fertility, mortality and marriage in both industrialized and developing countries. Employs microeconomic models to analyze individual and household decisions on such key demographic issues as fertility, marriage and family organization, human capital investment, and labor force participation. Demonstrates the interaction between economic and demographic change using data for a wide variety of countries. Emphasizes hands-on analysis and requires the completion of a data project utilizing econometric methods. Prior or concurrent enrollment in econometrics is recommended. Prerequisites: Economics 101 and 120. First semester. Ward-Batts

• *Public Sector Economics*

**183e. Freedom, Democracy, and Public Policy.**

To what extent should modern liberal democracies promote political, economic, and personal freedom? What conflicts arise among these freedoms and what constraints, if any, should government place on freedom? This course will explore these issues through classic readings and case studies on such controversies as hate speech, flag burning, importation of goods produced through child labor, legalizing drugs, pornography and censorship, and gun control. After examining the relationship of freedom to law and constitutionalism, the course will conclude by asking whether and how freedom promotes human happiness. Also listed as Government 183e. Prerequisites: Government 20 and Economics 50. (Not offered in 2003-2004.)

**186. Public Choice Economics.**

Analysis of the role of government in the economy and problems of collective decision-making. Prerequisite: Economics 101. (Not offered in 2003-2004.)

**188. Public Finance.**

Explores the reasons for government intervention in the economy, the extent of that intervention, and the responses of private agents to government actions. Demonstrates how economic models and research can inform our thinking about public policy issues. Includes a wide range of topical issues such as the effects of welfare reform and the merits of switching to a flat tax. Uses examples drawn from the United States and elsewhere. Prerequisites: Economics 101, 102, and 120. Second semester. Hess

- *Managerial Economics*

**190. Ethics and Management.**

A case method survey of ethical problems confronted by individuals in management positions. Emphasizes combining situational case studies, legal awareness, and alternative solutions based on theories of moral philosophy. Among areas covered are insider trading, tax evasion, audit failure, various conflicts of interest, and sexual harassment. Instruction focuses on legal and ethical principles and the application of critical thinking when faced with career-related moral dilemmas. Prerequisite: Economics 50. First semester. Teeples and Martin

**191. Business Law.**

An introduction to the American legal system emphasizing commercial transactions. Topics include: torts, property, contracts, sales, commercial paper, secured transactions, securities regulations, and bankruptcy. Prerequisite: Economics 50. Second semester. Taylor.

**192. The Economics of Organization.**

An introduction to modern theories of economic organizations, particularly the firm, that go beyond the neoclassical treatment of the firm as a single entity. The course will consider how various forms of transaction costs influence the organization of economic activity. Special emphasis will be placed upon the contractual interrelations between managers, workers, and consumers. Topics include managerial and employee incentives, internal labor markets, managerial compensation, corporate governance, vertical restraints, franchising, and advertising. Prerequisite: Economics 101. (Not offered in 2003-2004.)

- *Seminars and Independent Study*

**180. Seminar in Research Methods.**

This one-half credit course is a complement to preparation of a senior thesis in economics. The department strongly recommends this course for all majors who are preparing a senior thesis in economics, and the course is required for all students seeking to qualify for honors in economics. Students may take the course either the semester before enrolling in thesis, or take it concurrently with the senior thesis. Topics include identifying research questions, developing and testing hypotheses, analyzing and critiquing literature, empirical and theoretical methodology, and oral presentation. Course must be taken Credit-No Credit. First and second semester. Staff

**197s. Special Topics in Economics.**

These courses explore topics of current interest to faculty and students. Topics vary from year to year. At least one course related to Asian economies and/or political economy considerations will be offered in Spring 2004.

**199. Independent Study and Research.**

Students who have the necessary qualifications and who wish to investigate an area of study not covered in regularly scheduled courses may arrange for independent study under the direction of a faculty reader. (See "Academic Policies and Procedures" for details.) First and second semester. Staff