

Department of Economics

FACULTY *Professors Highhill, Sattler, Scott (chair), Weinstein; Associate Professors Felder, O'Brien, Wojcikewych; Assistant Professor Polley.*

The Department of Economics offers a major in the Foster College of Business Administration and in the College of Liberal Arts and Sciences. Normally, individuals planning a career in business should be in the Foster College of Business Administration, and individuals planning a career in government, politics, public policy, or the law should be in the College of Liberal Arts and Sciences. Students interested in an economics major are urged to consult with a departmental advisor for a suggested course of study that will serve their career objectives.

Courses in economics are designed for (1) students of other departments wishing to broaden their understanding of the economic forces of our world; (2) students planning to enter those business and professional careers in which a more specialized understanding of economics is important; and (3) students planning to continue the study of economics or related subjects in graduate school, in order to prepare for professional careers in economics.

The departmental requirements for the major are designed to provide the student with (1) the basic economic theory; (2) the basic quantitative tools; (3) a more specialized understanding of those particular areas of interest in economics; and (4) a broad background in the humanities, physical sciences, and social sciences.

Individuals planning to study for the Ph.D. in economics should take either a minor in mathematics or the following courses: MTH 121, MTH 122, MTH 207, and MTH 223. It is strongly advised that MTH 420 also be taken.

In addition to the University and Foster College of Business Administration requirements, students enrolled in the Department of Economics must fulfill the following requirements:

Economics 100 or 221, and 222, 300, 332, 333, 400, 498, 499

Junior/Senior Economics Electives 6 hrs.

At least one Heterodox Economics Course

(Economics 313, 345, 351, 362, 444) 3 hrs.

Philosophy 3 hrs.

Majors must receive a grade of C or better in Economics 332, 333, and 499.

Minimum of 26 semester hours in economics and a minimum of 20 hours at the junior/senior level.

A recommended course sequence for economics, Foster College of Business Administration, and basic skills courses is as follows. Elective courses should be chosen with care to ensure that the University general education and Foster College of Business Administration requirements are met.

Freshman Year	
ENG 101 Composition	3
MTH 115 Brief Calculus with Applications I.....	4
ATG 157 Accounting Principles.....	3
COM 103 The Oral Communication Process	3
BUS 100 Contemporary Business	3
BMA 172 / Competency Exam.....	1
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General Education Courses.....	15
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Sophomore Year	
BUS 210 Team Dynamics	1
ATG 158 Accounting Principles.....	3
ECO 221 Principles of Microeconomics	3
ECO 222 Principles of Macroeconomics	3
QM 262, 263 Quantitative Analysis I and II.....	6
Philosophy Elective.....	3
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General Education Courses.....	13
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Junior Year	
ENG 300, 301, 304, 305, or 306 Advanced Writing	3
ECO 332 Intermediate Microeconomics Theory.....	3
ECO 333 Intermediate Macroeconomics Theory.....	3
FIN 322 Business Finance.....	3
IB 306 Introduction to International Business.....	2
BMA 342 Legal Environment of Business	3
BMA 352 Managing in Organizations.....	3
BUS 220 Career Planning Strategies	1
MTG 315 Principles of Marketing.....	3
ECO 300 Economics Colloquium for Juniors	1
Economics Electives	6
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Senior Year	
BMA 372 Information Technology	3
ECO 498, 499 Senior Seminar in Economics	3
ECO 400 Economics Colloquium for Seniors.....	1
BMA 353 Operations Management	3
BMA 452 Strategic Management and Business Policy	3
Heterodox Elective	3
Behavioral Sciences.....	6
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Free Electives.....	4
General Education Courses.....	3
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Students interested in minoring in economics, see College of Liberal Arts and Sciences, Department of Economics.

Course Descriptions

ECO 100 Introduction to Economics

3 hrs. (Gen. Ed. SF)

Nature, scope, and methods of economics; current economic institutions, problems, and policies. Students who have already completed ECO 221 and/or 222 will not receive credit for this course. Not open to College of Business majors.

ECO 101 Introduction to Economic Issues

1 hr.

Application of economic method to analysis of contemporary issues. Emphasizes student participation in applications of economic principles to analysis of contemporary problems and policies. Prerequisite: concurrent enrollment in ECO 100.

ECO 200 Economics in Literature

1 hr.

Student-faculty discussion of "literary" texts, usually novels, from an economic perspective. Prerequisites: 3 hrs. of economics; consent of instructor.

ECO 221 Principles of Microeconomics

3 hrs. (Gen. Ed. SF)

Institutions, problems, and policies of the market system and alternative systems: allocation of resources and distribution of income. Not open to students with ECO 100.

ECO 222 Principles of Macroeconomics

3 hrs. (Gen. Ed. SF)

Process and determinants of overall economic activity and growth. National income accounting; determination of aggregate income, employment, and the price level; money and banking; government monetary and fiscal policies; international economics.

ECO 300 Economics Colloquium for Juniors

1 hr.

Student-faculty discussion of books and articles concerning significant economic ideas and issues not examined in depth in other courses. Prerequisites: economics major, junior standing.

ECO 301 Money and Banking

3 hrs.

Real and financial sectors of the economy. Emphasis on structure and process of financial intermediation and related policy issues. Prerequisites: ECO 100 or 221; ECO 222; junior/senior standing.

ECO 305 Public Expenditure and Finance

3 hrs.

Economic role of government in the U.S. economy. Determination of the size and economic functions of government, federal expenditure decisions and budgeting, equity and efficiency of various types of taxes, and selected problems in state and local finance. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 310 Labor Problems

3 hrs.

Theories of the labor movement; labor legislation and its effect on labor management and society's goals; theories of collective bargaining; impact of government economic policies on labor management relations; wage theory. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 313 American Economic History

3 hrs.

Changes in the processes of production and distribution in American economic development: their impact on economic institutions, and impact of economic institutions on economic development. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 319 Introduction to Econometrics**3 hrs.**

Techniques and procedures of application of statistical tools to economic research problems; selected methods for investigating the empirical validity of economic theory. Prerequisites: ECO 100 or 221; ECO 222; QM 263 or equivalent; junior/senior standing.

ECO 325 Urban Economics**3 hrs.**

Origins, economic structure, and functions of urban centers; selected economic problems and policies. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 332 Intermediate Microeconomic Theory**3 hrs.**

Optimizing behavior and market processes. Emphasizes proficiency in numerous microeconomic tools of analysis. Encourages thought about these tools and the real world they are designed to illuminate. Prerequisites: ECO 100 or 221; ECO 222; MTH 115 or 121 or consent of the instructor; junior/senior standing.

ECO 333 Intermediate Macroeconomic Theory**3 hrs.**

Integrated approach to the theory of income determination; contemporary growth models; explanations of cyclical fluctuations. Prerequisites: ECO 100 or 221; ECO 222; junior/senior standing.

ECO 335 Managerial Economics**3 hrs.**

Applying economic theory to the tools of operations research and business analysis: demand, cost, profit, and pricing. Decision theory of the firm. Prerequisites: ECO 100 or 221; ECO 222; QM 262 or equivalent; junior/senior standing.

ECO 345 Comparative Economic Systems**3 hrs.**

Analysis of three major types of economic systems. Systems are contrasted in terms of goals, goals achievement, capacity to generate growth, and as generators of a lifestyle. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 351 Economic Development**3 hrs.**

Economic behavior of people living in less developed countries: goals, constraints, means available, and choices made. Private sector, role of government, and relations with more developed countries. All topics studied in historical context. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 352 Industrial Organization**3 hrs.**

Structure, conduct, and performance of business enterprise in the U.S.; possible and actual role of government as a regulator of business enterprise, historically and philosophically. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 362 Economics and Law**3 hrs.**

Tort, property, contract, civil, and criminal law from the perspective of economics. Overview of microeconomic theory applied to legal problems to attain optimum welfare for the individual or community affected by issues before the law. Prerequisites: ECO 100 or 221; junior/senior standing.

ECO 390 International Monetary Economics**3 hrs.**

Adjustments in the world monetary economy including balance of payments adjustments and equilibrium and disequilibrium in foreign exchange markets. Cross listed as IB 390. Prerequisites: ECO 100 or 222; junior/senior standing.

ECO 391 International Trade**3 hrs.**

Welfare implications of international trade; balance of payments; equilibrium and disequilibrium; external and domestic policy effects on the balance of payments and welfare; international trade and financial cooperation among nations. Cross listed as IB 391. Prerequisites: ECO 100 or 221; ECO 222; junior/senior standing.

ECO 399 Special Topics in Economics**3 hrs.**

Topics of special interest which may vary each time course is offered. Topic stated in current Schedule of Classes. May be repeated under different topics. Prerequisite: junior/senior standing.

ECO 400 Economics Colloquium for Seniors**1 hr.**

Continuation of Economics 300, with more difficult and challenging readings. Prerequisites: economics major; senior standing.

ECO 418 Mathematical Economics**3 hrs.**

Application of mathematics to selected topics of economic theory. Prerequisites: ECO 100 or 221; ECO 222; MTH 122; junior/senior standing.

ECO 434 Readings in Economics**1 to 6 hrs.**

Individual readings for qualified students under the guidance of a member of the economics staff. Prerequisites: approval of the Chair of the Department of Economics; junior/senior standing.

ECO 444 History of Economic Thought**3 hrs.**

Development of Western economic thought in historical context; how new ideas influenced subsequent thought. Encompasses 16th Century mercantilism to Keynes. Prerequisites: ECO 100 or ECO 221; ECO 222; junior/senior standing.

ECO 498 Senior Seminar in Economics, Part I**0 hrs.**

Topics in economics selected, studied, and discussed by students as a group under faculty guidance. Each student begins to explore an area of economic thought in which he or she has a particular interest and plans to write a senior thesis. Required for all economics majors. Pass/Fail. Prerequisites: senior standing (junior standing with consent of instructor).

ECO 499 Senior Seminar in Economics, Part II**3 hrs.**

Topics in economics selected, studied, and discussed by students as a group under faculty guidance. Each student explores an area of economic thought in which he or she has a particular interest. Prerequisites: ECO 498; senior standing (junior standing with consent of instructor).

Department of Finance and Quantitative Methods

FACULTY Professors Bhandari, Horvath (*National City/Stevenson Professor, chair*), Webster; Associate Professors Gardner (*Stephens Chair*), Hatfield, A. Rubash, Showers.

The Department of Finance and Quantitative Methods serves actuarial science, finance, risk management and insurance majors, decision analysis minors, and others enrolled for one of the actuarial science, finance, quantitative methods, or risk management and insurance courses. Solid foundations in the fundamentals of these fields and the supporting areas of mathematics, communications, and the sciences, both natural and social, are stressed by departmental faculty. Graduates are equipped to adapt to rapidly changing and competitive environments. Innovation, creativity, and analysis are integrated into a diverse and rigorous program preparing students for graduate school or success in their chosen professional fields.

Social and professional activities available to students include the Actuarial Science Club, the Bradley Investment Organization, and the Financial Management Association and its National Honor Society.

Actuarial Science – Business Actuarial Science – Business Major

A career in actuarial science is widely recognized as one of the most attractive professions available to college graduates. Actuaries apply a unique set of business and mathematical skills in solving financial and social problems. Examples of organizations employing actuaries include insurance companies, public utilities, and select regulatory agencies.

The actuarial science major is a cooperative effort between the risk management and insurance program and the department of mathematics and is based on the premise that successful actuaries have mastered essential business and risk management and insurance knowledge along with specific actuarial mathematics skills.

The objective of Bradley's actuarial science program is to prepare majors for successful careers as actuaries. Required courses include several which help students prepare for several of the standard actuarial exams administered by the Society of Actuaries (SOA) and the Casualty Actuarial Society (CAS). Bradley is one of fewer than 30 schools in the United States to offer a risk management and insurance undergraduate major as well as an actuarial science major that prepares students to complete several exams.

A list of the program requirements is provided below, along with a recommended course sequence for actuarial science-business (ASB) majors.

Departmental requirements for an actuarial science – business major

- Complete the business core, substituting MTH 325 and 326 for QM 262 and 263, respectively; and substituting IME 313 for BMA 353.
- Actuarial Science Business (ASB) requirements:
 - All students must successfully complete the following courses:
 - CS 104 Computers and Programming with FORTRAN
or
CS 106 Introduction to Programming and Computer Science
 - MTH 121 Unified Calculus I
 - MTH 122 Unified Calculus II
 - MTH 223 Unified Calculus III
 - MTH 207 Elementary Linear Algebra with Applications
 - MTH 325 Probability and Statistics I
 - MTH 326 Probability and Statistics II
 - MTH 335 Topics in Actuarial Science
 - MTH 427 Applied Statistical Methods
 - MTH 510 Numerical Methods I
 - IME 313 Operations Research I
 - RMI 315 RMI Issues and Practice
 - All students must successfully complete one additional 3-credit-hour RMI course.
- All students are encouraged to take at least one of the following courses: ECO 301 Money and Banking, FIN 325 Investment Analysis, or FIN 425 Portfolio Theory and Management.
- All students must complete at least one professional actuarial exam administered by the Society of Actuaries.

A recommended course sequence for actuarial science–business majors is shown below. Elective courses should be chosen with care to ensure that the University general education requirements are satisfied.

Freshman Year	
ATG 157 Accounting Principles – Financial.....	3
ATG 158 Accounting Principles – Managerial.....	3
BUS 100 Contemporary Business	3
COM 103 The Oral Communication Process	3
ENG 101 English Composition	3
MTH 121 Calculus I	4
MTH 122 Calculus II	4
General Education Requirements.....	8
BMA 172 / Competency Exam	1
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Sophomore Year	
BUS 210 Team Dynamics	1
CS 104 Computers and Programming with FORTRAN or CS 106 Introduction to Programming and Computer Science	3
ECO 221 Principles of Microeconomics	3
ECO 222 Principles of Macroeconomics	3
MTH 223 Calculus III	4
MTH 207 Elementary Linear Algebra with Applications....	3
MTH 325 Probability and Statistics I.....	3
General Education Requirements.....	8
Behavioral Science Requirements.....	3
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Junior Year

BMA 342 Legal Environment of Business.....3
 BMA 352 Managing in Organizations.....3
 BUS 220 Career Planning Strategies1
 RMI 315 RMI Issues and Practice.....3
 FIN 322 Business Finance.....3
 IB 306 Introduction to International Business.....2
 IME 313 Operations Research I3
 MTH 326 Probability and Statistics II.....3
 MTH 335 Topics in Actuarial Science3
 General Education Requirements.....3
 Another 3-semester-hour RMI course.....3

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Senior Year

ECO 300-level.....3
 ENG 300, 301, 304, 305, or 306.....3
 MTH 427 Applied Statistical Methods3
 MTH 510 Numerical Methods I.....3
 MTG 315 Principles of Marketing.....3
 BMA 372 Information Technology3
 BMA 452 Strategic Management and Business Policy4
 Behavioral Science Requirements.....3
 Free Electives.....6

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Finance Major

Finance is the art and science of managing money and claims against money. The study of finance involves an analytic treatment of decision-making under conditions of risk and uncertainty. Graduates of this program are prepared to enter the dynamic and challenging world of finance or to continue their education in graduate school. MBA and MS in finance programs and law schools attract many graduates. The finance major enables students to understand the problems of obtaining and using monetary resources. Students select options preparing them for work in corporate finance, the securities area, futures, forward markets, options markets, real estate, insurance, or personal financial planning. International Financial Management and Financial Institutions and Markets courses are sometimes offered off campus in locations such as London and New York City.

Corporate

Students interested in corporate finance select courses providing a background in the various financial elements of corporate activities. Typically, financial management decisions involve capital budgeting and financing decisions as well as the daily activities associated with allocating and obtaining funds. A variety of optimization and modelling techniques are studied. The ability to develop a sound financial analysis of an opportunity is emphasized.

Securities

Students interested in the securities area select courses that will develop their skills in analyzing and selecting investment opportunities. Portfolio analysis as well as identification of individual security characteristics are stressed. The markets for securities of all types, domestic and international, are studied to provide an understanding of their opportunities and constraints. Implications of market efficiency are considered. The ability to develop a worthwhile and unique analysis of

investments is emphasized.

Markets and Institutions

Students interested in financial institutions such as insurance companies, banks, pension funds, and finance companies select courses that will prepare them for positions in these organizations. Modern technology, globalization and newer ideas associated with managing financial institutions are of particular importance. The decision-making ability needed for proper management of progressive organizations is developed through a variety of rigorous courses.

Other

The curriculum structure is suitable for students planning graduate study or entrepreneurial activities. Many past students now own and operate their own businesses.

Due to the highly quantitative nature of many areas of finance, the entering student is advised to have a strong mathematics background. Three years of algebra, one year of geometry, and a semester of trigonometry are recommended. It is also helpful for entering students to have and be able to use a personal computer.

Departmental requirements for a finance major:

- A. A total of 21 hours in finance courses in addition to Finance 322, Business Finance.
- B. FIN 494, Financial Strategy, plus a minimum of 3 additional hours in finance courses at the senior (4xx) level. These classes count as part of the required 21 hours in finance.
- C. Three hours from courses designated as "tools courses," selected from:
 Q M 326 Business Forecasting
 Q M 364 Decision Support Systems
 ATG 204 Cost Accounting
 ECO 319 Introduction To Econometrics
 ECO 418 Mathematical Economics
 RMI 365 Risk Analysis
- D. An approved three-hour functional area international course, selected from:
 FIN 323 International Financial Management
 ATG 361 International Accounting
 ECO 390 International Monetary Economics
 ECO 391 International Trade
 Note: FIN 323 also counts as part of the required 21 hours in finance.
 ECO 390 and 391 also count as the junior-senior level economics course required by the college.
- E. QM 260 Quantitative Methods in Finance
- F. Three hours in a computer programming language, selected from:
 CIS 102 Introduction to Computer Information Systems with BASIC
 CS 104 Computers and Programming with FORTRAN
 CS 106 Introduction to Programming and Computer Science

An illustrative course sequence follows. Elective courses should be chosen with care to ensure that the University general education and Foster College of Business Administration requirements are met.

Freshman Year

BUS 100 Contemporary Business	3
ENG 101 English Composition	3
MTH 115 or 121 Calculus I	4
QM 260 Quantitative Methods in Finance	3
ATG 157 Accounting Principles - Financial	3
COM 103 The Oral Communication Process	3
Programming Language (Section F)	3
General Education and/or Behavioral Science	8
BMA 172 / Competency Exam	1
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	31 or 32

Sophomore Year

ATG 158 Accounting Principles	3
BUS 210 Team Dynamics	1
ECO 221 Principles of Microeconomics	3
ECO 222 Principles of Macroeconomics	3
QM 262 Quantitative Analysis I	3
QM 263 Quantitative Analysis II	3
General Education, Behavioral Science, Finance Elective (FIN 220) and/or Tools Course (Section C, ATG 204)	16
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Junior Year

ENG 300, 301, 304, 305, or 306 Advanced Writing	3
FIN 322 Business Finance	3
MTG 315 Principles of Marketing	3
IB 306 Introduction to International Business	2
BMA 342 Legal Environment of Business	3
BMA 352 Managing in Organizations	3
BMA 372 Information Technology	3
BUS 220 Career Planning Strategies	1
Finance Electives (Consider Section D, FIN 323)	6
Tools Course (Section C), Finance Elective, General Education and/or Free Electives	3
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Senior Year

BMA 353 Operations Management	3
ECO Junior-Senior Elective (Consider Section D, ECO 390 or 391)	3
Finance Electives (Consider Section D, FIN 323)	6
Senior Finance Elective	3
FIN 494 Financial Strategy	3
BMA 452 Strategic Management and Business Policy	4
International Requirement (Section D) or Free Elective	3
General Education, Finance Elective, and/or Free Electives	6
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Risk Management and Insurance

Risk Management and Insurance Major

Every organization faces a myriad of risks. The well-being of organizations, employees and their families, competitors, customers, and the general public can depend on how such risks are handled. Using organizational resources to identify, evaluate, and treat risks efficiently and effectively is the challenge of risk management.

Risk management is about the assessment, control, and financing of risks. Insurance is an important and commonly used risk financing technique which allows the insured to transfer at least some of the responsibility for paying for losses to another party, such as a private insurance company or a government risk pool. A thorough understanding of risk management is essential to the effective management of any for-profit or not-for-profit entity.

The risk management and insurance (RMI) program aims to prepare creative and highly motivated students to assume positions of responsibility and leadership in the risk management and insurance fields. The undergraduate RMI major is an interdisciplinary, 24-credit-hour program which strives to cultivate the analytical, decision-making, ethics, team work, written, and oral communications skills needed by successful entrants into business and governmental risk management. Other career opportunities available to risk management and insurance graduates include actuarial science; employee benefits management and consulting; insurer financial, marketing, or personnel management; agency operations; broking; claims adjusting; underwriting; and global risk management and insurance. Alternatively, majors may pursue graduate degrees in the fields of law, business, or RMI, for example.

Departmental requirements for an RMI major

1. Required RMI foundation courses (15 credit hours)
Students must successfully complete the following courses:
RMI 315 Risk Management and Insurance
Issues and Practice
FIN 322 Business Finance
RMI 365 Risk Analysis
RMI 415 Risk Control and Financing
RMI 465 Advanced Studies in Risk Management
and Insurance
2. An approved 3-credit-hour international economics or finance course.
Students must successfully complete one of the following courses:
FIN/IB 323 International Financial Management
ECO/IB 390 International Monetary Economics
ECO/IB 391 International Trade

Note: ECO 390 and 391 also count as the junior/senior level economics course required by the Foster College of Business Administration.
3. Six credit hours in an approved supporting area.
Students will select focus areas in cooperation with their advisor. The focus area must consist of 6 credit hours, be consistent with and supportive of the student's career objectives, and be approved by a Risk Management and Insurance faculty member.

Examples of focus areas include actuarial science, entrepreneurship, financial institutions, human resource management, investments, and marketing. Other focus areas may be acceptable.

A recommended course sequence for risk management and insurance majors is shown below. Elective courses should be chosen with care to ensure that the University general education requirements are satisfied.

Freshman Year

ATG 157 Accounting Principles-Financial	3
BUS 100 Contemporary Business	3
COM 103 The Oral Communication Process	3
ENG 101 English Composition	3
MTH 115 Calculus ¹	4
General Education and/or Behavioral Science	15
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Sophomore Year

ATG 158 Accounting Principles-Managerial	3
BUS 210 Team Dynamics	1
ECO 221 Principles of Macroeconomics	3
ECO 222 Principles of Macroeconomics	3
QM 262 Quantitative Analysis I.....	3
QM 263 Quantitative Analysis II.....	3
General Education, Behavioral Science, and/or Free Electives.....	15
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Junior Year

BMA 342 Legal Environment of Business.....	3
BMA 352 Managing in Organizations.....	3
BUS 220 Career Planning Strategies	1
ENG 300, 301, 304, 305 or 306 Advanced Writing	3
RMI 315 Risk Management and Insurance Issues and Practice	3
FIN 322 Business Finance.....	3
RMI 365 Risk Analysis	3
IB 306 Introduction to International Business.....	2
MTG 315 Principles of Marketing	3
Focus Area Course.....	3
General Education, Focus Area, and/or Free Electives.....	4
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Senior Year

BMA 353 Operations Management	3
BMA 372 Information Technology	3
BMA 452 Strategic Management and Business Policy	4
Economics junior/senior elective	3
RMI 415 Risk Control and Financing	3
RMI 465 Adv. Studies in Risk Management and Insurance.....	3
General Education, focus area, ECO 390, 391, or FIN 323 and/or free electives	12
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¹Students pursuing a focus area in actuarial science should take MTH 121 instead of MTH 115. Students pursuing actuarial studies should also take MTH 122 Calculus II, MTH 223 Calculus III, and MTH 325 Probability and Statistics I before graduating.

Decision Analysis Minor

The minor in Decision Analysis is designed to provide students with a solid foundation of mathematical and quantitative tools essential to sound decision-making. All areas of academic study such as sociology, psychology, and health sciences, may benefit from the application of analytical thought. Thus, this program will assist students in all majors across campus in formulating optimal solutions to common problems they will encounter in their professional lives. Students enrolled in the Decision Analysis program will acquire the skills to critically evaluate alternative solutions to complex questions in an analytical and pragmatic manner. Upon graduation these students will find themselves better prepared to assume responsible positions of authority and to perform their professional duties in a resourceful and productive manner.

In addition to the University requirements and those imposed by the student's college, a minor in Decision Analysis must complete the following or their equivalents:

Required:

Q M 262 - Quantitative Analysis I (3 hours)
Q M 263 - Quantitative Analysis II (3 hours)

Nine (9) hours from Groups A and B with at least six (6) from Group A:

Group A:

Q M 326 - Business Forecasting (3 hours)
Q M 364 - Decision Support Systems (3 hours)
Q M 369 - Topics in Quantitative Methods (3 hours)

Group B:

ECO 319 - Introduction to Econometrics (3 hours)
ECO 418 - Mathematical Economics (3 hours)
Q M 498 - Independent Study in Quantitative Methods (1 - 3 hours) or a quantitative methods course in the student's major if approved by the FQM Department

Students whose major is from the Foster College of Business Administration must have at least 12 hours in courses that are unique from those used to fulfill their major requirements. Students should consult their academic advisor.

Course Descriptions

Finance

FIN 220 Personal Finance

3 hrs. (Gen. Ed. SF)

Principles and practice of management of personal income, wealth, and credit; budgeting, sources of financing, savings, estate planning, and institutions of personal finance.

FIN 322 Business Finance

3 hrs.

Capital budgeting and principles of financial management. External and internal sources of funds: costs and profitable uses in business organizations. Prerequisites: ATG 157 and junior/senior standing.

FIN 323 International Financial Management**3 hrs.**

Financial characteristics of international business. International exchange, liquidity, markets, investments, and banking, in context of historical development, environmental characteristics, economic factors, political systems, and legal constraints. Emphasis on exchange rate exposure management. Cross listed as IB 323.

Prerequisites: ATG 158; ECO 222; junior/senior standing.

FIN 325 Investment Analysis**3 hrs.**

Principles of investment analysis. Introduction to security valuation using fundamental analysis with associated trading rules. Introduction to technical analysis/charting with trading rules. Functions and descriptions of securities markets and trading. Prerequisites: FIN 322, QM 262.

FIN 327 Derivative Securities**3 hrs.**

Overview of options, futures, swaps, and related financial securities. Examination of exchanges, pricing issues, arbitrage, and trading strategies. Applications emphasize the use of derivative securities for managing financial risk. Prerequisites: FIN 322, QM 260.

FIN 328 Financial Institutions and Markets**3 hrs.**

Operation of financial institutions and interrelationships between their operations and economic activity; credit flow and money movements, in the context of financial institutions' operations. Structure and organization of the financial system; emphasis on markets and intermediaries. Prerequisites: ECO 100 or ECO 221; ECO 222; junior standing.

FIN 384 Entrepreneurial Finance**3 hrs.**

Planning and strategies involved in starting or expanding a business. Emphasis on capitalization, record keeping, liquidity management, fixed asset management, financial analysis, expansion strategies, establishing firm value, and exiting the firm. Cross-listed with BMA 384.

Prerequisites: BMA 352; FIN 322.

FIN 421 Liquidity Management**3 hrs.**

Managing firms' liquidity position; emphasis on use of positive and normative models dealing with short term assets and liabilities; ensuring liquidity while enhancing firm value. Prerequisite: FIN 322, QM 263.

FIN 422 Financial Analysis**3 hrs.**

Interpretation and analysis of corporate financial statements. Current annual and interim reports as a source of data for management, stockholders, and creditors. Prerequisite: FIN 322, QM 263.

FIN 423 Advanced Business Finance**3 hrs.**

Complex problems of the corporate finance manager. Emphasis on modern finance tools in managerial decision making. Recent literature of corporate finance. Prerequisite: FIN 322, QM 263.

FIN 424 Capital Budgeting**3 hrs.**

Long-term capital investment decisions and long-term financing. Strategic wealth creation, general valuation principles, evaluation of net present value rule, alternative capital budgeting methods, ranking projects, taxation, marginal cash flows, and the impact of inflation. Single-investment risk analysis, risk analysis for top management and fully diversified investors, cost of capital, capital structure, dividend policy, interactions between investment and financing decisions, leasing, and capital rationing. Prerequisite: FIN 322, QM 263.

FIN 425 Portfolio Theory & Management**3 hrs.**

Introduction to portfolio theory. Diversification concepts. Market-oriented capital asset pricing model, options pricing model, and arbitrage pricing theory. Market efficiency. Relationship of portfolio theory to fundamental and technical analyses. Portfolio management and evaluation techniques. Prerequisites: FIN 325; QM 260; QM 263.

FIN 426 Financial Research and Modeling**3 hrs.**

Modeling financial processes, cash flows, security prices, etc., for decision making. Econometric, distribution-based, Markov and Stochastic Process concepts are employed. Treats risk/uncertainty identification, measurement and management. Prerequisites: QM 260; QM 263; FIN 322, and one additional jr./sr. finance course.

FIN 429 Topics in Finance**3 hrs.**

Topics of special interest which may vary each time course is offered. Topic and prerequisite stated in current Schedule of Classes. May be repeated under different topics for a maximum of nine hours credit.

FIN 494 Financial Strategy**3 hrs.**

Contemporary review of theory and practice of financial risk management. Principles for managing financial risk are applied to interest rates, exchange rates, and commodity prices. Financial engineering is incorporated into unified ethical and sustainable managerial problem solving and policy decisions designed to achieve successful operations. Supporting financial elements areas are integrated to understand and appreciate their interdependencies and benefits as a culminating academic experience. Prerequisites: 12 hours of finance at 300 or 400 level.

FIN 498 Independent Study in Finance**1-3 hrs.**

Studies undertaken by academically qualified students under guidance of a faculty member. Open to Finance and Quantitative Methods Department majors only. May be repeated under different topics for a maximum of six hours credit. Prerequisites: junior/senior standing; 2.5 of cumulative grade point average; consent of Department Chair.

Quantitative Methods

Q M 260 Quantitative Methods in Finance

3 hrs.

Introduction to mathematics of finance. Emphasis is placed on the applications of mathematical techniques to important financial concepts such as capital budgeting, measures of risk and return, investments, and market efficiency. Techniques of optimization as applied to diversification and portfolio management. Prerequisite: MTH 115 or MTH 121.

QM 262 Quantitative Analysis I

3 hrs.

Data presentation and computation of descriptive measures. Probability theory, probability distributions, expectations, variance, covariance, and correlation coefficient. Sampling, central limit theorem, statistical estimation, one or two sample tests of hypotheses. Prerequisite: MTH 109 or equivalent.

QM 263 Quantitative Analysis II

3 hrs.

Linear and multiple regression, correlation, analysis of variance, contingency tables, time series, decision theory, and non-parametric methods. Data analysis using statistical computer packages. Prerequisites: QM 262; MTH 115 or 121.

QM 326 Business Forecasting

3 hrs.

Develops basic principles and techniques of forecasting through integration of scientific and judgmental forecasting in financial applications. Objective analysis of historical data is combined with subjective insight to demonstrate how data for budgets can be developed, profits maximized, and risks reduced. Emphasis on use of forecasting by individual firms. Prerequisites: QM 263 and junior/senior standing.

QM 364 Decision Support Systems

3 hrs.

Deterministic and probabilistic models of management science and use of computer-based support for the decision making process. Models such as linear and integer programming, transportation and assignment problems, CPM/PERT, simulation and queueing models. Applications in a variety of business areas using the computer. Prerequisites: BMA 172 or equivalent; QM 262; junior/senior standing.

QM 369 Topics in Quantitative Methods

3 hrs.

Topics of special interest which may vary each time course is offered. Topic stated in current Schedule of Classes. May be repeated under different topics for a maximum of six hours. Prerequisite: junior/senior standing.

QM 498 Independent Study in Quantitative Methods

1-3 hrs.

Studies undertaken by academically qualified students under guidance of a faculty member. Open to Finance and Quantitative Methods Department majors only. May be repeated under different topics for a maximum of six hours. Prerequisites: junior/senior standing; 2.5 cumulative grade point average; consent of Department Chair.

Risk Management and Insurance

RMI 315 Risk Management and Insurance Issues and Practice

3 hrs.

The fundamental aspects of risk management and insurance (RMI). Emphasis on understanding the nature of risk assessment, control, and financing activities for organization. RMI policy issues impacting the firm (e.g., discrimination, health care and financing, environmentalism). Cross-listed as BMA 315. Prerequisite: junior standing.

RMI 365 Risk Analysis

3 hrs.

The nature and importance of risk analysis; qualitative and quantitative risk analysis data; user-friendly approaches to constructing statistical estimates for risk; loss analysis; using risk and loss estimates in decision making and related public policy issues (e.g., fair versus unfair risk factors). Prerequisites: RMI 315; QM 262.

RMI 415 Risk Control and Financing

3 hrs.

The nature and importance of risk financing; integrating cost of risk with accounting, tax, financial, economic, and psychological information; risk control and financing methods ranging from conventional to innovative; role of financial engineering; impact of risk financing decisions on accounting and financial statements; risk financing implementation. Prerequisites: RMI 315; FIN 322.

RMI 465 Advanced Studies in Risk Management

3 hrs.

Small teams examine various risk management scenarios and make appropriate recommendations. Students conduct a risk management review for a local small business and make appropriate recommendations. Emphasis on enhancing written and oral communication skills. Prerequisites: RMI 315; RMI 365 or 415.

RMI 492 Independent Study or Research in RMI

1-3 hrs.

Studies or research undertaken by academically qualified students under the guidance of a faculty member. May be repeated for a maximum of 6 semester hours. Prerequisites: RMI or ASB major and consent of RMI program director.