

ECONOMICS, BACHELOR OF SCIENCE (B.S.) [SCHOOL OF BUSINESS]

Economics is the science of human choice, the study of how scarce resources are allocated among competing uses to satisfy human wants. Since many choices analyzed are made by or affect business decision makers, economics is a unique blend of liberal arts and business. Therefore, the Department of Economics offers an undergraduate major in both the College of Humanities and Sciences and the School of Business. The major in the College of Humanities and Sciences is designed for students who desire the flexibility and breadth that is associated with a liberal arts degree. Students who want to combine training in economics with exposure to the business disciplines should consider the major in the School of Business.

Undergraduate work in economics is excellent preparation for careers in business, government and teaching, as well as for graduate work in economics and professional schools such as law, public administration and medicine. Specialization in economics prepares students for careers that emphasize analytical thinking, a broad understanding of the economy and business organizations and the proper choice of policies by governments and business enterprises. Because of their analytical, quantitative and decision-making skills, students who major in economics are sought after for a wide array of positions in management and sales. The specific skills they acquire also provide employment opportunities in large organizations with departments that forecast business conditions and analyze economic data of special interest to the organizations.

The mission of the B.S. in Economics is to provide undergraduate students with economic knowledge and skills that will enable them to compete successfully in changing regional, national and global economic environments.

Learning goals

- Critical thinking
- Quantitative proficiency
- Communication

Learning outcomes

Upon completing this program, students will know and know how to do the following:

- Students will solve key microeconomic problems.
- Students will solve key macroeconomic problems.
- Students will be able to interpret and analyze data and express economic relationships using graphs, equations and words.
- Students will demonstrate strong oral and written communication skills.
- Students will be able to employ economic models and data to analyze questions of economic significance.

Special requirements

The foundation program specifies course work required during the freshman and sophomore years. Students are eligible for admission into the advanced business program with a major in the School of Business

upon meeting the minimum cumulative GPA requirement and successful completion of:

Course	Title	Hours
A minimum of 54 credits in the foundation program		54
ACCT 203 & ACCT 204	Introduction to Accounting I and Introduction to Accounting II	6
BUSN 201	Foundations of Business	3
BUSN 225	Winning Presentations	3
ECON 210	Principles of Microeconomics	3
ECON 211	Principles of Macroeconomics	3
INFO 160	Digital Literacy: Computer Concepts, Internet, Digital Devices	1
INFO 161	Digital Literacy: Word Processing Skills	1
INFO 162	Digital Literacy: Spreadsheets Skills I	1
INFO 165	Digital Literacy: Spreadsheet Skills II	1
SCMA 212	Differential Calculus and Optimization for Business	3
or MATH 200	Calculus with Analytic Geometry I	
UNIV 111 Play course video for Focused Inquiry I	Focused Inquiry I	3
UNIV 112 Play course video for Focused Inquiry II	Focused Inquiry II (with a minimum grade of C)	3
UNIV 200	Inquiry and the Craft of Argument (with a minimum grade of C)	3

The admission requirements for the School of Business (<http://bulletin.vcu.edu/undergraduate/business/undergraduate-information/academic-policies>) detail the deadlines for students to be admitted to the advanced business program with a major in the school. At least 30 hours of the required business courses for the Bachelor of Science must be taken at VCU.

All baccalaureate degree programs in the School of Business require successful completion of the business knowledge exam as administered in BUSN 499.

Students may need to take additional mathematics courses as prerequisites to SCMA 212 or MATH 200. These credits will count as electives in the foundation program. The sample curriculum outline includes MATH 151 since many of our students will need to complete this course.

The INFO 160, INFO 161, INFO 162 and INFO 165 requirements may be waived upon successful completion of a Knowledge Equivalency Test administered by the Office of Undergraduate Studies. No more than two additional credits may be applied to the degree from the INFO 16x series.

No more than four credits in physical education courses may be applied to the degree.

INTL 493 may not be counted toward a business degree.

Credit for SPCH 121 or SPCH 321 will substitute for BUSN 225, and no more than three credits of these courses may be applied toward a business degree. Credit for STAT 210 or STAT 212 will substitute for SCMA 301. Students who earned a minimum grade of B in ECON 203 at VCU may substitute that credit for ECON 210.

Degree requirements for Economics, Bachelor of Science (B.S.)

Business foundation (60 credits minimum) ¹

General Education requirements (34 credits minimum) ²

Course	Title	Hours
University Core Education Curriculum		
UNIV 111 Play course video for Focused Inquiry I	Focused Inquiry I	3
UNIV 112 Play course video for Focused Inquiry II	Focused Inquiry II	3
UNIV 200	Inquiry and the Craft of Argument	3
Approved humanities/fine arts		3
Approved natural/physical sciences		3-4
Approved quantitative literacy:		3-4
SCMA 212	Differential Calculus and Optimization for Business	
or MATH 200	Calculus with Analytic Geometry I	
Approved social/behavioral sciences		3-4
Total Hours		21-24

Course	Title	Hours
Business general education requirements		
ECON 210	Principles of Microeconomics	3
ECON 211	Principles of Macroeconomics	3
INFO 160	Digital Literacy: Computer Concepts, Internet, Digital Devices	1
INFO 161	Digital Literacy: Word Processing Skills	1
INFO 162	Digital Literacy: Spreadsheets Skills I	1
INFO 165	Digital Literacy: Spreadsheet Skills II	1
Business general education electives (Select credits from the approved list.)		3
Total Hours		13

Additional Business Foundation requirements

Course	Title	Hours
ACCT 203 & ACCT 204	Introduction to Accounting I and Introduction to Accounting II	6
BUSN 201	Foundations of Business	3
BUSN 225	Winning Presentations	3
Open electives		11-14
Total Hours		23-26

¹

Students may complete additional course work (if needed) in electives to total 60 credit hours in business foundation.

²

Students who receive waivers to these required courses must complete additional business general education electives to reach the 34-credit minimum.

Advanced business program

Course	Title	Hours
Advanced business core		
BUSN 325	Organizational Communication	3
BUSN 499	Business Knowledge Exam	0
FIRE 311	Financial Management	3
MGMT 303	Creativity and Ideation	3
MGMT 310	Managing People in Organizations	3
MGMT 434	Strategic Management (capstone)	3
MKTG 301	Marketing Principles	3
SCMA 301	Business Statistics I	3
Major requirements		
Advanced core (flexible by major)		
BUSN 323	Legal Environment of Business	3
ECON 300	Contemporary Economic Issues	3
ECON 403	Introduction to Mathematical Economics	3
or SCMA 320	Production/Operations Management	
ECON 501	Introduction to Econometrics	3
or SCMA 302	Business Statistics II	
INFO 360	Business Information Systems	3
Major-specific courses		
ECON 301	Microeconomic Theory	3
ECON 302	Macroeconomic Theory	3
ECON 431	Labor Economics	3
or ECON 441	Experimental Economics	
or ECON 461	Monetary Policy Seminar	
or ECON 489	Senior Seminar in Economics	
ECON electives (300- or 400-level or 501) ¹		15
Total Hours		60

¹

ECON 501 may be used as an elective if SCMA 302 is taken as a required course. ECON 403 may be used as an elective if SCMA 320 is taken as a required course. BUSN 400 and BUSN 401 may be used as electives for students enrolled in the International Consulting Program.

The minimum total of credit hours required for this degree is 120.

Business general education electives

Course	Title	Hours
Additional University Core Education Curriculum approved courses		
Any AFAM, ANTH, ANTZ, ARTH, BIOL, BIOZ, CHEM, CHEZ, CRJS, DANC, ENGL, ENVS, FRSC, FRSZ, HIST, INNO, INSC, INTL (except INTL 493), MASC, MATH, PHIL, PHYS, PHYZ, POLI, PSYC (except PSYC 214), RELS, SOCS, SOCY, USRP or WRLD course		
Any foreign language course		
Any honors-designated course taught outside of the School of Business		
Any of the following UNIV courses:		
UNIV 211	Food for Thought	

UNIV 213 Play course video for The Truth About Lying	The Truth About Lying	
UNIV 217	Finding Your Voice in Contemporary Society	
UNIV 222	Pseudoscience	
UNIV 299	What's the Big Idea?	

What follows is a sample plan that meets the prescribed requirements within a four-year course of study at VCU. Please contact your adviser before beginning course work toward a degree.

Freshman year

Fall semester		Hours
INFO 160	Digital Literacy: Computer Concepts, Internet, Digital Devices	1
INFO 162	Digital Literacy: Spreadsheets Skills I	1
MATH 151	Precalculus Mathematics	4
UNIV 111 Play course video for Focused Inquiry I	Focused Inquiry I	3
Approved University Core Education Curriculum courses		6
Term Hours:		15

Spring semester

BUSN 225	Winning Presentations	3
INFO 161	Digital Literacy: Word Processing Skills	1
INFO 165	Digital Literacy: Spreadsheet Skills II	1
UNIV 112 Play course video for Focused Inquiry II	Focused Inquiry II	3
MATH 200	Calculus with Analytic Geometry I	4
Approved University Core Education Curriculum course		3
Term Hours:		15

Sophomore year

Fall semester		Hours
ACCT 203	Introduction to Accounting I	3
BUSN 201	Foundations of Business	3
ECON 210	Principles of Microeconomics	3
UNIV 200	Inquiry and the Craft of Argument	3
Business general education elective		3
Term Hours:		15

Spring semester

ACCT 204	Introduction to Accounting II	3
BUSN 323	Legal Environment of Business	3
ECON 211	Principles of Macroeconomics	3
MKTG 301	Marketing Principles	3
SCMA 301	Business Statistics I	3
Term Hours:		15

Junior year

Fall semester

BUSN 325	Organizational Communication	3
ECON 300	Contemporary Economic Issues	3
ECON 301	Microeconomic Theory	3
ECON 403	Introduction to Mathematical Economics or Production/Operations Management	3
or SCMA 320		
MGMT 310	Managing People in Organizations	3
Term Hours:		15

Spring semester

ECON 302	Macroeconomic Theory	3
FIRE 311	Financial Management	3
INFO 360	Business Information Systems	3
MGMT 303	Creativity and Ideation	3
Approved economics elective		3
Term Hours:		15

Senior year

Fall semester

BUSN 499	Business Knowledge Exam	0
ECON 501	Introduction to Econometrics or Business Statistics II	3
or SCMA 302		
Approved economics electives		9
Open elective		3
Term Hours:		15

Spring semester

MGMT 434	Strategic Management	3
ECON 431	Labor Economics	3
or ECON 441	or Experimental Economics or Monetary Policy Seminar or Senior Seminar in Economics	
ECON 461		
or ECON 489		
Approved economics elective		3
Open electives		6
Term Hours:		15
Total Hours:		120

The minimum total of credit hours required for this degree is 120.

ECON 101. Introduction to Political Economy. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Seminar on the development of critical thought and economic analysis of policy issues. Focus is on how policy choices affect society and the individual, the economic methodology that guides policy choices, and the institutional and political environments within which policy is derived. Issues cover a broad range of topics including environmental issues, tax policy, inflation expectations, unemployment, foreign trade and the effectiveness of fiscal and monetary policies. Crosslisted as: INTL 102.

ECON 203. Introduction to Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. A survey of economic principles, institutions and problems. The course is designed to provide basic economic understanding for students who do not expect to major in economics or in the School of Business. Not applicable for credit toward economics and business majors. Also note that students may receive credit for only two of the following three courses: ECON 203, 210 or 211.

ECON 205. The Economics of Product Development and Markets. 3 Hours.

Semester course; 3 lecture hours. 3 credits. An introduction to some of the fundamental economic concepts necessary to effectively operate in today's marketplace. Basic elements of microeconomics, net present value analysis and market strategy will be covered in class. The goal is to provide students with a better understanding of how to approach business problems and of proven problem-solving techniques. Appropriate for engineering and non-engineering students.

ECON 210. Principles of Microeconomics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. A course designed to acquaint the student with a theoretical and practical understanding of the economic institutions and problems of the American economy with a focus on microeconomics. Note that students may receive credit toward their degree requirements for only two of the following three courses: ECON 203, 210 and 211.

ECON 211. Principles of Macroeconomics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with minimum grade of a B or ECON 210. A course designed to acquaint the student with a theoretical and practical understanding of the economic institutions and problems of the American economy with a focus on macroeconomics. Note that students may receive credit toward their degree requirements for only two of the following three courses: ECON 203, 210 and 211.

ECON 291. Topics in Economics. 1-3 Hours.

Variable hours. Variable credit. Maximum of 3 credits per topic. Prerequisite: permission of instructor. An in-depth study of selected business topics. Graded as pass/fail at the option of the department.

ECON 300. Contemporary Economic Issues. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B or ECON 210; ECON 211; and junior standing. Students will learn to think critically about current policy issues using basic economic principles. Communication skills will be developed through presenting, discussing and debating alternative positions in class. Students will work in teams to outline the basic economic incentives and the direct and indirect costs and benefits associated with different policy actions. Through teamwork students will practice leadership skills and methods to manage group dynamics. Topics will vary by semester and may include the economics of discrimination, the environment, health care, cultural arts, education, business ethics, fiscal policy, monetary policy, globalization, inequality and immigration.

ECON 301. Microeconomic Theory. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B or ECON 210; and SCMA 212 or MATH 200. Analysis of the principles that govern production, exchange and consumption of goods and services. Topics include demand analysis, production and cost theory, price and output determination, theory of markets and distribution theory.

ECON 302. Macroeconomic Theory. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B grade or ECON 210; ECON 211; and SCMA 212 or MATH 200. A general survey of national income analysis and macroeconomic theory. Detailed study of public policies affecting price levels, employment, economic growth and the balance of payments.

ECON 303. Managerial Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B and ECON 211; or ECON 210 and ECON 211; and SCMA 212 or MATH 200. This course is restricted to students who have completed at least 54 credit hours (junior standing). Application of tools of economic analysis to allocation problems in profit and nonprofit organizations. Models for evaluating revenue, production, cost and pricing will be presented. Emphasis on developing decision rules for turning data into information for solving problems.

ECON 305. Public Finance. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. An economic analysis of federal, state and local government budgeting, revenue sources and expenditures.

ECON 307. Money and Banking. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 211. A study of money, financial markets and the financial structure with emphasis on commercial banks and the Federal Reserve System. Relationships between economic activity and money supply are introduced.

ECON 312. E-commerce and Markets for Information Goods. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. This course surveys the ways that information and emerging information technologies affect market organization and market efficiency. Competitive strategies and regulatory policy for information markets also are considered. Topics include network effects, first mover advantages, auctions, price discrimination and organizational structure.

ECON 313. Economics of Transportation. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. An economic analysis of the transportation industry with special emphasis on regulation, public policy and urban transportation.

ECON 315. Economic Development. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B and ECON 211; or ECON 210 and ECON 211. An introduction to the process of economic development. Surveys development theory and experiences of underdeveloped countries of Africa, Asia, Latin America and the Caribbean and of developed countries. Explores obstacles to development and policies and tools for stimulating economic development. Crosslisted as: AFAM 315/INTL 315.

ECON 321. Urban Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. An introduction to urban economics, with an emphasis on the economics of agglomeration and the role of externalities in the urban economy. Economic analysis of the provision of urban public services and urban public financing, especially in politically fragmented areas. Crosslisted as: URSP 321.

ECON 325. Environmental Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. This course is restricted to students who have completed at least 54 credit hours (junior standing). The application of economic analysis to externalities such as air and water pollution, pesticide control, land use planning and other environmental issues. The role of cost/benefit analysis in the decision-making process is developed. Efficiency and equity issues are evaluated.

ECON 329. International Economics. 3 Hours.

3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B and ECON 211; or ECON 210 and ECON 211. An analysis of economic and political influences on exports and imports, balance of payments, foreign investment, exchange rates and international monetary systems. Crosslisted as: INTL 329.

ECON 333. Behavioral Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. Identifies when behavior systematically violates mainstream models and provides alternative behavioral models which are psychologically and empirically plausible. Discusses a variety of violations including endowment effects, framing, dynamic inconsistency and the winner's curse.

ECON 338. Game Theory. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. Analyzes strategic situations using game theory. Applies the analysis to a variety of settings and questions. Develops an understanding of the uses and limitations of the analysis.

ECON 344. Biodiversity and Ecological Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. Explores the use of both economic and ecological approaches to the identification, valuation and protection of biological diversity and ecological integrity. Investigates the potential of coupled human and natural systems through construction and computer simulation of dynamic ecological-economic models.

ECON 402. Business Cycles and Forecasting. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B and ECON 211; or ECON 210 and ECON 211. An examination of repetitive variations in business activity. The measurement and analysis of economic fluctuations and how they affect the business environment. Stresses modern forecasting techniques.

ECON 403. Introduction to Mathematical Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B grade or ECON 210; ECON 211; and MGMT 212 or SCMA 212 or MATH 200. Enrollment is restricted to students who have completed at least 54 credit hours (junior standing). The application of mathematical techniques to economic theory and economic models.

ECON 419. History of Economic Thought. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B and ECON 211; or ECON 210 and ECON 211. A survey of the ideas of major economic contributors to modern economic thought. Theories of value, growth and distribution from the 18th through the 20th centuries will be presented.

ECON 421. Government and Business. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. The application of economic analysis to the behavior of business, industry and government regulation. Topics include the causes and exercise of monopoly power, antitrust enforcement, public utilities and industry studies.

ECON 431. Labor Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 300, 301 and 302; and STAT 210, STAT 212, MGMT 301 or PSYC 214. This course is restricted to students who have completed at least 54 credit hours (junior standing). Analysis of labor markets and institutions to gain an understanding of the process of wage and employment determination. Both historic and current topics are included.

ECON 441. Experimental Economics. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 300, ECON 301 and 302; and STAT 210, STAT 212, MGMT 301 or PSYC 214; and junior standing. Students will learn about the leading models of decision making and human behavior in markets. The course will focus on using experimental methods to test the models' hypotheses. Students will learn how to design experiments, collect experimental data, and how to examine the data and interpret the results.

ECON 442. Economic Growth. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: ECON 203 with a minimum grade of B and ECON 211; or ECON 210 and ECON 211. Explores determinants of cross-country income differences using economic models, economic history and data analysis. Analyzes factors that influence productivity growth and diffusion of technology between countries.

ECON 461. Monetary Policy Seminar. 3 Hours.

Semester course; 3 lecture/seminar hours. 3 credits. Prerequisites: ECON 300, ECON 301 and ECON 302; and STAT 210, STAT 212, MGMT 301 or PSYC 214. Enrollment is restricted to students with junior standing. Students work individually and in teams to formulate and justify a monetary policy recommendation. Students will base their recommendation on an economic analysis of current conditions and their prediction regarding the future state of the economy. The class is organized around discussions and presentations, with short lectures as needed.

ECON 489. Senior Seminar in Economics. 3 Hours.

3 lecture hours. 3 credits. Prerequisites: ECON 300, ECON 301 and 302; STAT 210, STAT 212, MGMT 301 or PSYC 214; and junior standing. Analysis of economic theory and problems. Students will study a few topics in depth, focusing on understanding the current research, critically analyzing controversial issues and using data to investigate competing claims.

ECON 491. Topics in Economics. 1-3 Hours.

Semester course; variable hours. Variable credit. Maximum of 3 credits per topics course; maximum total of 6 credits for all topics courses. Prerequisite: junior standing. An in-depth study of a selected economic topic, to be announced in advance.

ECON 492. Independent Study in Economics. 1-3 Hours.

Semester course; 1-3 credits. Maximum total of 3 credits. Prerequisites: junior or senior standing as an economics major and approval of adviser and department chair prior to course registration. Intensive study under supervision of a faculty member in an area not covered in depth or contained in the regular curriculum.

ECON 493. Internship in Economics. 1-3 Hours.

Semester course; the student is expected to work at the site 15-20 hours per week. 1-3 credits. Prerequisites: junior standing, a minimum of 3.0 GPA in economics courses, at least 15 economics credits and permission of the department chair. Intention to enroll must be indicated to the instructor prior to or during registration for semester of credit. The internship is designed to give students practical experience in an appropriate supervised environment in the public or private sector. Graded as pass/fail.