Economics

Degree Offered

- Bachelor of Science

Economics Program Objectives

In the broadest sense, economics is the science of decision-making. In economics, students learn how to identify the costs, benefits, and consequences of a decision. Government economists assess economic conditions in the U.S. and abroad and estimate the economic impact of specific changes in legislation or public policy. Economists in private industry work largely for marketing research firms, management consulting firms, banks, investment firms, and insurance companies. A degree in economics is also highly desirable for students who plan to attend graduate school or law school. The College of Business and Economics has an excellent record of placing economics students in both.

The Department of Economics has developed several areas of strength including market-based solutions to social and economic problems and, though its long relationship with the University’s well-known Regional Research Institute, a focus on spatial econometric and regional analysis. Cooperation with the finance department faculty allows the department to leverage its strength in financial economics.

Economics is an excellent major for anybody interested in a career in:

- Banking
- Business
- Domestic government service
- Foreign service
- Law
- Politics

FACULTY

DEPARTMENT CHAIRPERSON

- Clifford B. Hawley - Ph.D. (Duke University)

PROFESSORS

- Roger Congleton - Ph.D. (Virginia Polytechnic Institute and State University)
  Public economics, Public choice.
- Clifford B. Hawley - Ph.D. (Duke University)
  Labor economics, Personnel economics, Managerial economics, Statistics.
- William S. Reece - Ph.D. (Washington University)
  Public economics, Applied econometrics.

ASSOCIATE PROFESSORS

- Arabinda Basistha - Ph.D. (University of Washington)
  Empirical macroeconomics.
- Brian J. Cushing - Ph.D. (University of Maryland)
  Urban/regional economics, Poverty, Econometrics, Public finance.
- John Deskins - Ph.D. (University of Tennessee)
  Director, Bureau of Business & Economic Research.
- Stratford M. Douglas - Ph.D. (University of North Carolina)
  Energy economics, Applied econometrics.
- Joshua Hall - Ph.D. (West Virginia University)
  Applied microeconomics.
- Brad Humphreys - Ph.D. (Johns Hopkins University)
  Sports economics, Economics of gambling.
- Donald Lacombe - Ph.D. (Florida State University)
  Spatial econometrics, Industrial organization, Public finance, Public choice.
- Shuichiro Nishioka - Ph.D. (University of Colorado at Boulder)
  International trade, Economic development.
- Jane Ruseski - Ph.D. (Johns Hopkins University)
Economics

Associate Director, Bureau of Business & Economic Research.

• Feng Yao - Ph.D. (Oregon State University)
  Theoretical & applied econometrics.

• Andrew Young - Ph.D. (Emory University)
  Economic growth & development, Macroeconomics, Austrian economics.

ASSISTANT PROFESSORS

• Pedro Bento - Ph.D. (University of Toronto)
  Macroeconomics.

• Adam Nowak - Ph.D. (Arizona State University)
  Econometrics, Financial economics.

• Eric Olson - Ph.D. (University of Alabama)
  Macroeconomics, Monetary policy, Financial economics.

• Amanda Ross - Ph.D. (Syracuse University)
  Urban economics, Public finance, Real estate economics, Economics of crime.

• Royce J. Watts - MS (West Virginia University)
  Statistics.

• Dongwoo Yoo - Ph.D. (Ohio State University)
  Economic development, Economic history.

EMERITI

• Robert D. Britt
• Ming-Jeng Hwang
• Kern Kymn
• Patrick C. Mann
• Tom S. Witt

ADJUNCT PROFESSORS

• Victor Chow - Ph.D. (University of Alabama)
  Business finance, Security analysis, Portfolio management.

• Randall Jackson - Ph.D. (University of Illinois at Urbana-Champaign)
  Regional economic development.

• David Martinelli - Ph.D. (University of Maryland)
• Timothy Phipps - Ph.D. (University of California)
  Applied econometrics.

• Peter Schaeffer - Ph.D. (University of Southern California)
  Economic policy, Regional & rural economics, development.

• Harry Turtle - Ph.D. (University of Alberta)
  Investment theory, Portfolio issues, International finance.

ADJUNCT ASSOCIATE PROFESSOR

• Paul Speaker - Ph.D. (Purdue University)
  Economic modeling.

Admission Requirements

Students must formally apply for admission to the economics program at the beginning of the first semester sophomore year or at the beginning of the first semester in which they will meet the program course prerequisites. Applicants must possess an overall GPA of at least 2.5 to be considered for admission. The following course prerequisites must be completed with a minimum grade of C:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201</td>
<td>Principles of Accounting</td>
<td>6</td>
</tr>
<tr>
<td>&amp; ACCT 202</td>
<td>and Principles of Accounting</td>
<td></td>
</tr>
<tr>
<td>CS 101</td>
<td>Intro-Computer Applications</td>
<td>4</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Microeconomics</td>
<td>6</td>
</tr>
<tr>
<td>&amp; ECON 202</td>
<td>and Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 225</td>
<td>Elemntry Business/Economics Stat</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 211</td>
<td>Elemntry Statistical Inference</td>
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</table>
ENGL 101 & ENGL 102
Composition And Rhetoric and Composition And Rhetoric
or ENGL 103
Accelerated Academic Writing
Choose one of the following:
MATH 126A College Algebra 5-Day
MATH 129 Pre-Calculus Mathematics
MATH 126B College Algebra 4-Day
MATH 153 Calculus 1a with Precalculus
Choose one of the following:
MATH 150 Applied Calculus **
MATH 154 Calculus 1b with Precalculus **
MATH 155 Calculus 1 **
MATH 156 Calculus 2 **
Total Hours 28-33

* A minimum grade of one B and one C are required in ECON 201 and ECON 202 for admission to the program.
** A minimum grade of B is required in MATH 150 for admission to the program. A grade of C in MATH 154 or a higher college calculus course satisfies the calculus requirement for admission to the program.

Qualified applicants are admitted into the economics program in order of descending GPA, calculated using all (transferable) baccalaureate coursework attempted at regionally accredited institutions. The College will accommodate as many economics majors as resources are available. Students who are denied admission to the economics program because of GPA may elect to apply to the program in a future semester or accept admission to an alternative bachelor’s program within the College.

**GENERAL EDUCATION CURRICULUM**

Please use this link to view a list of courses that meet each GEC requirement. (http://registrar.wvu.edu/current_students/general_education_curriculum)

NOTE: Some major requirements will fulfill specific GEC requirements. Please see the curriculum requirements listed below for details on which GECs you will need to select.

**General Education Curriculum**

ENGL 101 & ENGL 102
Composition And Rhetoric and Composition And Rhetoric
or ENGL 103
Accelerated Academic Writing
GEC 2A - Mathematics
GEC 2B - Natural and Physical Science
GEC 2C - Additional GEC 2A, B or C
GEC 3 - The Past and Its Traditions
GEC 4 - Issues of Contemporary Society
GEC 5 - Artistic Expression
GEC 6 - The Individual in Society
GEC 6F - First Year Seminar
GEC 7 - American Culture
GEC 8 - Western Culture
GEC 9 - Non-Western Culture
Total Hours 38-45

**Degree Requirements**

To qualify for the Bachelor of Science in Economics students must meet the following criteria:

• Complete a minimum of 120 credit hours.
• Possess an overall GPA of 2.5.
• Possess a minimum GPA of 2.5 for all major courses (i.e. ECON), calculated using the most recent letter grade attempted.
• Upper-division business and economics course work must be completed in residence at WVU. Exceptions to this requirement must be approved by the dean or designee.

Curriculum Requirements

Most economics electives should not be attempted until ECON 301 has been completed with a minimum grade of C. Students interested in graduate work in economics should take ECON 421 and ECON 425. Of the twenty-one semester hours of required business electives and business and economics electives completed by an Economics major, no more than twelve semester hours may consist of economics courses.

A minimum GPA of 2.5 is required in all ECON courses

Select one of the following: 6

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<thead>
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<tr>
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<tbody>
<tr>
<td>MATH 126A &amp; MATH 150</td>
<td>College Algebra 5-Day and Applied Calculus</td>
</tr>
<tr>
<td>MATH 126B &amp; MATH 150</td>
<td>College Algebra 4-Day and Applied Calculus</td>
</tr>
<tr>
<td>MATH 129 &amp; MATH 155</td>
<td>Pre-Calculus Mathematics and Calculus 1</td>
</tr>
<tr>
<td>MATH 153 &amp; MATH 154</td>
<td>Calculus 1a with Precalculus and Calculus 1b with Precalculus</td>
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GEC Objective 2B

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ECON 201</td>
<td>Principles of Microeconomics (May fulfill GEC 4 or 8) ***</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Macroeconomics (May fulfill GEC 4 or 8) **</td>
</tr>
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</table>

GEC Objectives (select one each from objectives 3, 5, 6, 7, and 9) 15

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<tr>
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<tr>
<td>ACCT 201</td>
<td>Principles of Accounting</td>
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<tr>
<td>ACCT 202</td>
<td>Principles of Accounting</td>
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<td>BCOR 199</td>
<td>Introduction to Business</td>
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Select one of the following: 3

<table>
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<tr>
<td>ECON 225</td>
<td>Elemntry Business/Economcs Stat</td>
</tr>
<tr>
<td>STAT 211</td>
<td>Elemntry Statistical Inference</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermed Micro-Economic Theory ***</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Intermed Macro-Economic Theory ***</td>
</tr>
<tr>
<td>ECON 481</td>
<td>American Economic History</td>
</tr>
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</table>

Economics Electives 15

Business Electives 9

Business & Economics Electives 12

Unrestricted Electives 19

Total Hours 120

* A minimum grade of B is required in MATH 150. A minimum grade of C in MATH 154 or a higher college calculus course satisfies the calculus requirement.

** A minimum grade of one B and one C are required in ECON 201 and ECON 202..

*** A minimum grade of C is required in ECON 301 and ECON 302.

Suggested Plan of Study

First Year

<table>
<thead>
<tr>
<th>Term</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCOR 199</td>
<td>3 ACCT 201</td>
<td>3</td>
</tr>
<tr>
<td>CS 101</td>
<td>4 ECON 201</td>
<td>3</td>
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</table>
Select one of the following:  
ENGL 101  
MATH 126A  
MATH 126B  
MATH 129  
MATH 153  
GEC Objective 2B, 3, 5, 6, 7, 9  
GEC Objective 2B, 3, 5, 6, 7, 9  
MATH 156  
GEC Objective 2B, 3, 5, 6, 7, 9  
GEC Objective 2B, 3, 5, 6, 7, 9  

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>ACCT 202</td>
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<tr>
<td>ECON 202</td>
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<td>3</td>
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<tr>
<td>ECON 225</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
<td>3</td>
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<tr>
<td>GEC Objective 2B, 3, 5, 6, 7 or 9</td>
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<td>3</td>
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<tr>
<td>Unrestricted Electives</td>
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Total credit hours: 120

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>Business and Economics Elective</td>
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<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Economics Elective</td>
<td>3</td>
<td>3</td>
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<tr>
<td>GEC Objective 2B, 3, 5, 6, 7, 9</td>
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<td>3</td>
</tr>
<tr>
<td>Unrestricted Electives</td>
<td>3</td>
<td>3</td>
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Fourth Year

<table>
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<tr>
<th>Course</th>
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<th>Spring Hours</th>
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</thead>
<tbody>
<tr>
<td>Business Elective</td>
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<td>3</td>
</tr>
<tr>
<td>Business and Economics Elective</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Economics Elective</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Unrestricted Electives</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Total credit hours: 120

COURSES

ECON 201. Principles of Microeconomics. 3 Hours.
PR: Sophomore standing. Introductory microeconomics analysis. Competitive behavior of firms, price determination, efficiency in production and equity in distribution. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

ECON 202. Principles of Macroeconomics. 3 Hours.
PR: ECON 201. Introductory macroeconomics analysis. Aggregate demand and supply, saving, investment, the level of employment and national income determination, monetary and fiscal policy. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

ECON 225. Elemntry Business/Economics Stat. 3 Hours.
PR: Sophomore standing and MATH 126 with grade of "C" or better or MATH 129 with grade of "C" or better or MATH 153 with grade of "C" or better or MATH 154 with grade of "C" or better or MATH 150 or MATH 155 or MATH 156. Basic concepts of statistical models, distributions, probability, random variables, tests of hypotheses, confidence intervals, regression and correlation with emphasis on business and economics examples. (Equivalent to STAT 211.)

ECON 293A-Z. Special Topics. 1-6 Hours.
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ECON 301. Intermed Micro-Economic Theory. 3 Hours.
PR: ECON 201. Consumer choice and demand; price and output determination of the firm, and resource allocation, under different market structures; welfare economics, externalities, public goods, and market failure; general equilibrium; other topics.
ECON 302. Intermed Macro-Economic Theory. 3 Hours.
PR: ECON 201 and ECON 202. Forces which determine the level of income, employment, output, the inflation rate, and the balance of trade. Particular attention to consumer behavior, investment determination, and government fiscal and monetary policy.

ECON 306. History of Economic Thought. 3 Hours.
PR: ECON 201 and ECON 202. Economic ideas in perspective of historic development.

ECON 331. Money and Banking. 3 Hours.
PR: ECON 201 and ECON 202. The U.S. monetary and banking system and its functional relationship to the economic system; monetary theory and policy.

ECON 411. Moral Foundations-Capitalism. 3 Hours.
PR: ECON 201 and ECON 202. Introduction to the moral foundations of capitalism. Compare and contrast alternative ethical systems using economic analysis when relevant.

ECON 421. Intro Mathematical Economics. 3 Hours.
PR: ECON 202 and (MATH 150 or MATH 155 or MATH 156.) Principal mathematical techniques including set operation, matrix algebra, differential and integral calculus employed in economic analysis. Particular attention given to static (or equilibrium) analysis, comparative-static analysis and optimization problems in economics.

ECON 425. Introductory Econometrics. 3 Hours.

ECON 441. Public Economics. 3 Hours.
PR: ECON 202. Economic roles of the public sector. Particular attention to market failure, redistributing income, the financing of public sector activities, relationships between federal, state, and local governments, and public choice.

ECON 445. Government and Business. 3 Hours.

ECON 446. Transportation Economics. 3 Hours.
PR: ECON 202. Economic and institutional analysis of the domestic transportation system of the United States. Topics include role of transportation, carrier characteristics and services, transportation rates and costs, regulation of transportation.

ECON 447. Economics of Travel & Tourism. 3 Hours.
PR: ECON 201. Application of economic analysis to travel and tourism. Topics include consumer demand and business firm behavior in the travel and tourism industry, pricing, and role of government in the industry.

ECON 451. International Economics. 3 Hours.

ECON 452. Economics of Cuba. 3 Hours.
PR: ECON 201 and ECON 202 or consent. CoReq: HIST 242 or POLS 355. The Cuban economy during the socialist period with focus on the crisis period after the loss of Soviet subsidies. This course requires travel to Cuba.

ECON 453. Economic Transition in Europe. 3 Hours.
PR: ECON 201 and ECON 202. Socialism and transition from socialism to capitalism. The experiences of the European transitional economies. Requires travel to one of the transitional economies at the student’s expense.

ECON 453A. Economic Transition-Europe Trv. 1 Hour.
PR: ECON 201 and ECON 202. Socialism and transition from socialism to capitalism. The experiences of the European transitional economies. Requires travel to one of the transitional economies at the student’s expense.

ECON 454. Comparative Economic Systems. 3 Hours.
PR: ECON 202. Structure and processes of existing economic systems including capitalism, planned socialism, and market socialism. Problems encountered by economies in transition from planned socialism to capitalism.

ECON 455. Economic Development. 3 Hours.
PR: ECON 202. The problems, changes, and principal policy issues faced by non-industrialized countries.

ECON 461. Regional Economics. 3 Hours.
PR: ECON 202. Analysis of the regional economy’s spatial dimension, emphasizing interregional capital and labor mobility, the role of cities, objectives and issues of regional policy, lagging regions and Appalachia, growth poles, and regional growth and income distribution.

ECON 462. Urban Economics. 3 Hours.
PR: ECON 202. Analyzes growth, decline, and socioeconomic problems of cities. Topics include the development of cities, urban spatial structure and land-use patterns, poverty and discrimination, housing, urban transportation and congestion, local government structure, and urban fiscal problems.
ECON 471. Labor Economics. 3 Hours.
PR: ECON 202. Labor market analysis. Topics include wage and employment determination, human capital theory, discrimination, unemployment, migration, effects of unions and government regulation, and life-cycle patterns of work.

ECON 481. American Economic History. 3 Hours.

ECON 490. Teaching Practicum. 1-3 Hours.
PR: Consent. Teaching practice as a tutor or assistant.

ECON 491. Professional Field Experience. 1-18 Hours.
PR: Consent. (May be repeated up to a maximum of 6 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

ECON 493A-Z. Special Topics. 1-6 Hours.
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ECON 494A-Z. Seminar. 1-3 Hours.
PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

ECON 495. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

ECON 496. Senior Thesis. 1-3 Hours.
PR: Consent.

ECON 498A-Z. Honors. 1-3 Hours.
PR: Students in Honors Program and consent by the honors director. Independent reading, study or research.