

# Economics, B.S.

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## Degree Offered

- Bachelor of Science

## Nature of the Program

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 for marketing research firms, management consulting firms, banks, investment firms, insurance companies, and in pricing and strategy departments of firms like Amazon and Microsoft. A degree in economics is also highly desirable for students who plan to attend law school or graduate school in economics, data analytics, or public policy. The John Chambers College of Business and Economics has an excellent record of placing economics students in both law and graduate schools.

The Department of Economics has several areas of strength including market-based solutions to social and economic problems, urban and regional economics, and health economics.

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

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

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## FACULTY

### DEPARTMENT CHAIRPERSON

- Feng Yao - Ph.D. (Oregon State University)  
Theoretical Econometrics, Applied Econometrics

### PROFESSORS

- Roger Congleton - Ph.D. (Virginia Polytechnic Institute and State University)  
Public Economics, Public Choice, Constitutional Political Economy
- Joshua Hall - Ph.D. (West Virginia University)  
Public Economics, Public Choice, Urban and Regional Economics
- Brad Humphreys - Ph.D. (Johns Hopkins University)  
Urban and Regional Economics, Sports Economics
- Jane Ruseski - Ph.D. (Johns Hopkins University)  
Health Economics, Sports Economics
- Feng Yao - Ph.D. (Oregon State University)  
Theoretical Econometrics, Applied Econometrics

### ASSOCIATE PROFESSORS

- Arabinda Basistha - Ph.D. (University of Washington)  
Empirical Macroeconomics, International Finance
- John Deskins - Ph.D. (University of Tennessee)  
Public Economics
- Daniel Grossman - Ph.D. (Cornell University)  
Health Economics
- Bryan McCannon - Ph.D. (Pennsylvania State University)  
Public Economics, Public Choice, Law and Economics
- Shuichiro Nishioka - Ph.D. (University of Colorado at Boulder)  
International Trade, Economic Development
- Adam Nowak - Ph.D. (Arizona State University)  
Applied Econometrics, Urban and Regional Economics

- Scott Schuh - Ph.D. (Johns Hopkins University)  
Applied Macro Theory, Monetary Economics, Household Finance

## ASSISTANT PROFESSORS

- Nathaniel Burke - Ph.D. (University of Arkansas)  
Experimental Economics, Economics of Education, Group Identity
- Cathleen Johnson - Ph.D. (Virginia Polytechnic Institute and State University)  
Experimental Economics, Economic Education
- Kole Reddig - Ph.D. (Carnegie Mellon University)  
Health Economics, Industrial Organization, Applied Microeconomics
- Palak Suri - Ph.D. (University of Maryland)  
Urban Economics, Labor Economics

## SERVICE ASSOCIATE PROFESSOR

- Edward Timmons - Ph.D. (Lehigh University)  
Labor Economics, Health Economics

## ADJUNCT PROFESSORS

- Victor Chow - Ph.D. (University of Alabama)
- Randall Jackson - Ph.D. (University of Illinois at Urbana-Champaign)
- David Martinelli - Ph.D. (University of Maryland)
- Brad Price - Ph.D. (University of Minnesota)
- Peter Schaeffer - Ph.D. (University of Southern California)
- Paul Speaker - Ph.D. (Purdue University)
- Heather Stephens - Ph.D. (The Ohio State University)
- Meg Tuszynski - Ph.D. (George Mason University)

## EMERITI

- Brian Cushing
- Stratford Douglas
- Clifford Hawley
- Ming-Jeng Hwang
- Patrick Mann
- William Reece
- Tom Witt

## Admissions

**For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions.**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics *	6
ECON 225 or STAT 211	Elementary Business and Economics Statistics Elementary Statistical Inference	3
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	

Choose one of the following; a minimum of B- is needed in MATH 150 or C- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 **	
MATH 150	Applied Calculus **	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 **	
Total Hours		20-24

\*  
At minimum, 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.

Major Code: 2135

[Click here to view the Suggested Plan of Study \(p. 5\)](#)

## General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (<http://registrar.wvu.edu/gef/>)

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

Code	Title	Hours
<b>General Education Foundations</b>		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

## 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 2.0.
- Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		46
Program Requirements		23
Economics Major Requirements		51
Total Hours		120

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives		32
Total Hours		46

## Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

## Economics Major 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.

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
ECON 301	Intermediate Micro-Economic Theory (Minimum grade of C-)	3
ECON 302	Intermediate Macro-Economic Theory (Minimum grade of C-)	3
ECON 425	Introductory Econometrics	3
ECON 482	Applied Economic Research	3
Economics Electives		12

Chambers College Electives*	21
Total Hours	51

\*

Chambers College Electives must be completed by 300- or 400-level coursework and can include Economics courses (no limit).

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
BCOR 191		1 ACCT 201	3
BCOR 199		3 ECON 201 (GEF 4)	3
BCOR 121		2 ENGL 101 (GEF 1)	3
Select one of the following:		3-4 Select one of the following:	3-4
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3
GEF (Choose from F2B, F5, F6 or F7)	3		
General Electives	3		
		15	15

### Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)		3 BCOR 299	3
ECON 225 (GEF 8)		3 ECON 301	3
ENGL 102 (GEF 1)		3 Chambers Elective	6
GEF (Choose from F2B, F5, F6 or F7)		6 Minor or General Electives	3
		15	15

### Third Year

Fall	Hours	Spring	Hours
Chambers Elective		3 ECON 425	3
ECON 302		3 Chambers Elective	3
Economics Elective		3 Economics Elective	3
Minor or General Electives		6 Minor or General Electives	6
		15	15

### Fourth Year

Fall	Hours	Spring	Hours
Chambers Elective		6 Chambers Elective	3
Economics Elective		3 Economics Elective	3
Minor or General Electives		6 ECON 482	3
		Minor or General Electives	6
		15	15

Total credit hours: 120

## Area of Emphasis

- Law and Economics (p. 5)

## LAW AND ECONOMICS AREA OF EMPHASIS

Code	Title	Hours
ECON 425	Introductory Econometrics	3
ECON 441	Public Economics	3
ECON 443	Law and Economics	3

ECON 445	Government and Business	3
Total Hours		12

\*Economics electives exist now in the plan of study. Those wanting to do this AoE will take these four classes to fulfill their major.

## Accelerated Program

- B.S. Economics and M.S. Economics (p. 6)

## BSBA Degree Requirements

The Chambers College Accelerated Bachelor's to Master's (ABM) program offers highly motivated economics students with an interest in the Master of Science in Economics the opportunity to complete a Bachelor of Science and a Master's degree in an accelerated format. In order to be eligible for this program, you must:

- Have a 3.0 after the fall semester of your sophomore year,
- Have completed 24 undergraduate credits in residence,
- Indicate your interest in the program by March of your junior year, and
- Successfully complete the required courses.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Economics Major Requirements		51
Total Hours		108

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives		20
Total Hours		34

## Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	

MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

## Economics Major 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.

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
ECON 301	Intermediate Micro-Economic Theory (Minimum grade of C-)	3
ECON 302	Intermediate Macro-Economic Theory (Minimum grade of C-)	3
ECON 482	Applied Economic Research	3
Economics Electives		15
Business Electives		21
Total Hours		51

\* Economics Electives and Business Electives must be completed by 300- or 400-level coursework.

\*\* Business Electives include all subject codes offered by the John Chambers College of Business and Economics.

## Masters of Science

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required.		
BUDA 520	Data Management	3
Research Design and Methodology *		3
ECON 509	Research Design/Methodology *	
ECON 510	Microeconomic Theory	3
ECON 525	Econometric Theory and Practice	3
ECON 526	Causal Inference	3
ECON 541	Public Economics Theory and Practice	3
ECON 561	Regional Economics	3
ECON 565	Health Economics Theory and Practice	3
ECON 571	Economics of Labor	3
ECON 582	MS Economics Practicum	3
Total Hours		30

\* MS in Economics students are required to take ECON 509 every semester during the program until they reach 3 credits.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
BCOR 121		2 ACCT 201	3
BCOR 191		1 ECON 201	3
BCOR 199		3 ENGL 101	3
Select one of the following:		3 MATH 150	3
MATH 122		GEF 2B, 5, 6, or 7	3
MATH 124			

MATH 150						
Minor/Unrestricted Elective		3				
GEF 2B, 5, 6, or 7		3				
		15		15		
<b>Second Year</b>						
<b>Fall</b>	<b>Hours</b>		<b>Spring</b>	<b>Hours</b>		
ECON 202			3 BCOR 299		3	
ECON 225			3 ECON 301		3	
ENGL 102			3 Business Elective		6	
GEF 2B, 5, 6, or 7			6 Minor/Unrestricted Elective		3	
		15		15		
<b>Third Year</b>						
<b>Fall</b>	<b>Hours</b>		<b>Spring</b>	<b>Hours</b>		
ECON 302			3 Business Elective		3	
Business Elective			3 Economics Elective		6	
Economics Elective			3 Minor/Unrestricted Elective		6	
Minor/Unrestricted Elective		6				
		15		15		
<b>Fourth Year</b>						
<b>Fall</b>	<b>Hours</b>		<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
Business Elective			6 Business Elective		3 ECON 561	3
ECON 510			3 ECON 482		3 ECON 571	3
ECON 525			3 ECON 526		3	
Minor/Unrestricted Elective			3 ECON 565		3	
			Minor/Unrestricted Elective		3	
		15		15		6
<b>Fifth Year</b>						
<b>Fall</b>	<b>Hours</b>		<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
BUDA 520			3 ECON 509		3 ECON 509	3
ECON 509			3 ECON 541		3 ECON 582	3
		6		6		6

Total credit hours: 144

\*

In order to register on time for Fall, students must apply for ABM by March 1 prior to Senior year.

## Degree Requirements

To qualify for the Bachelor of Science in Economics and Doctor of Jurisprudence joint program, you must meet the following criteria:

- Have a 3.0 after your freshman year,
- Have a 3.2 after your sophomore year,
- Have a 3.4 after the first semester of your junior year,
- Take the LSAT in October of your junior year,
- Complete the first three years as outlined in the plan of study, and
- Apply to and be accepted by the Law School. Those who apply by January 15<sup>th</sup> of their junior year with LSAT scores of 158 or higher and an undergraduate GPA of 3.7 or higher will be admitted to the College of Law. Students with a GPA of 3.4-3.69 and an LSAT less than 158 will have their application considered alongside the general Law School applicant pool.



Code	Title	Hours
	University Requirements	16
	Program Requirements	23
	Economics Major Requirements	51
	Doctor of Jurisprudence Requirements	30
	Total Hours	120

## University Requirements

Code	Title	Hours
	General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
	Outstanding GEF Requirements 2, 5, 6, and 7	13
BCOR 191	First-Year Seminar	1
	General Electives	2
	Total Hours	16

## Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201	Principles of Microeconomics (GEF 4)	3
ECON 202	Principles of Macroeconomics (GEF 8)	3
	Select one of the following (GEF 8):	3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
	Select one of the following (Minimum Grade of C-; may fulfill GEF 1):	3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
	Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher:	3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
	Total Hours	23

## Economics Major Requirements

Code	Title	Hours
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication	3
ECON 301	Intermediate Micro-Economic Theory	3
ECON 302	Intermediate Macro-Economic Theory	3
ECON 425	Introductory Econometrics	3
ECON 441	Public Economics	3
ECON 443	Law and Economics	3
ECON 445	Government and Business	3
ECON 465	Health Economics	3
ECON 482	Applied Economic Research	3

Chambers Elective (300 or higher B&E elective towards a minor)	21
Total Hours	51

## Doctor of Jurisprudence Requirements

Code	Title	Hours
LAW 641	Introduction to Legal Research	1
LAW 675	Introduction to the Profession	1
LAW 700	Legal Analysis, Research and Writing 1	3
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
LAW 686	Civil Procedure	4
Total Hours		30

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
BCOR 191		1 ENGL 101 (GEF 1)	3
BCOR 199		3 ECON 202 (GEF 8)	3
BCOR 121		2 ACCT 201	3
Select one of the following (GEF 3):		3-4 Select one of the following:	3-4
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3
ECON 201 (GEF 4)	3		
GEF (Choose from F2B, F5, F6 or F7)	3		
	15		15

### Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 BCOR 299	3
ECON 225 (GEF 8)		3 ECON 302	3
ECON 301		3 ECON 425	3
ECON 443		3 ECON 445	3
GEF (Choose from F2B, F5, F6 or F7)		3 ECON 465	3
	15		15

### Third Year

Fall	Hours	Spring	Hours
ECON 441		3 ECON 482	3
Chambers Elective		3 Chambers Elective	3
Chambers Elective		3 Chambers Elective	3
Chambers Elective		3 Chambers Elective	3
GEF (Choose from F2B, F5, F6 or F7)		3 Chambers Elective	3
	15		15

### Fourth Year

Fall	Hours	Spring	Hours
LAW 641		1 LAW 703	4

LAW 686	4	LAW 707	4
LAW 700	3	LAW 675	1
LAW 705	3	LAW 711	2
LAW 709	4	LAW 725	4
		15	15

Total credit hours: 120

Once accepted to the College of Law, students will complete all of the requirements of the Doctor of Jurisprudence degree ([http://catalog.wvu.edu/graduate/law/academic\\_policies\\_and\\_procedures/academic\\_programs/jd/#majortext](http://catalog.wvu.edu/graduate/law/academic_policies_and_procedures/academic_programs/jd/#majortext)) as are in effect when the student begins at the College of Law. The classes taken during the first year at the College of Law will count toward both the student's undergraduate degree and Doctor of Jurisprudence degree. During their second and third years at the College of Law, students shall be responsible for fulfilling all of the other requirements in order to graduate with the Doctor of Jurisprudence as in effect when the student began at the College of Law. Students should communicate with their undergraduate program during their 4th year of undergraduate/1st year of law school to coordinate graduating with their undergraduate degree in the August following the completion of their first year of law classes.

## Major Learning Outcomes

### ECONOMICS

Upon successful completion of the B.S. degree, **Economics** majors will be able to:

1. Explain definitions and interpretations of macroeconomic data.
2. Analyze the causes and consequences of unemployment, inflation, economic growth, and monetary and fiscal policy.
3. Diagram market equilibrium and predict the impacts of exogenous changes on equilibrium outcomes for individuals, firms, and markets.
4. Assess the efficiency of competitive market outcomes relative to alternative arrangements.
5. Evaluate the theoretical and empirical literature on an economic topic in written form.
6. Produce an original research report that formulates a research question, proposes a methodology to answer that research question, and interpret the results' statistical significance and economic importance.