

ECONOMETRICS & QUANTATIVE ECONOMICS

(Bachelor of Science)

academics.siu.edu/business/quantitative-economics/

Dr. Kevin Sylwester, director

School of Analytics, Finance and Economics

138A Henry J. Rehn Hall

Telephone: 618/453-1421

The study of economics examines how individuals, businesses, and other entities allocate resources to achieve their goals. A strong economics background can help one better conduct market analyses important for business, predict movements in financial markets, and understand effects of government policies. To pursue these endeavors, employers increasingly want students that have training in statistics, math, and computer programming as these employers will pay a premium to employees that have these skills. The Econometrics and Quantitative Economics (EQE) major is designed to provide these skills and to enable graduates to apply this training to economic issues.

MAJOR REQUIREMENTS - 33 HOURS

COURSE	TITLE	PREREQUISITES	Projected offerings:		
			Summer	Fall	Spring
ECON 208	Business Data Analysis	MATH 139	X	X	X
ECON 240	intro to Microeconomics	SIU math requirement	X	X	X
ECON 241	Intro to Macroeconomics	SIU math requirement	X	X	X
ECON 340	Intermediate Microeconomics	ECON 240		X	X
ECON 341	Intermediate Macroeconomics	ECON 241		X	X
ECON 463	Intro to Applied Econometrics	ECON 208 or equivalent			X
ECON 465	Mathematical Economics I	ECON 340 or 440 and MATH 140		X	
Computer Science and Mathematics: Choose three of the following CS and MATH courses. At least three credit hours must come from CS and three credit hours from MATH.					
CS 202	Intro to Computer Science	C or better in MATH 111 or equivalent		X	X
CS 215	Discrete Mathematics	C or better in MATH 111 or equivalent		X	X
CS 220	Programming with Data Structures	C or better in CS 202 and 215		X	X
CS 221	Intro to Internet and Mobile Computing	C or better in CS 202		X	X
CS 300	Intro to Linux		Not Currently Available		
CS 306	Linux/UNIX Programming	C or better in CS 220 and 221		X	X
MATH 150/151	Calculus I/Calculus I Enhanced	C or better in MATH 111 or 108 plus 109	X	X	X
MATH 221	Intro to Linear Algebra	C or better in MATH 150/151		X	X
MATH 305	Intro to Differential Equations	C or better in MATH 250		X	X

			Projected offerings:		
COURSE	TITLE	PREREQUISITES	Summer	Fall	Spring
MATH 318	Intro to Mathematics Software	B or better in MATH 150/151 or C or better in MATH 250	Not Currently Available		
MATH 319	Intro to Abstract Algebra I	C or better in MATH 302		X	
MATH 349	Intro to Discrete Mathematics	C or better in MATH 221 and 250; Co-requisite or prior completion of MATH 302	Not Currently Available		
MATH 352	Theory of Calculus	C or better in MATH 302			X
MATH 380	Elements of Probability	CS 202 and MATH 250	Not Currently Available		
MATH 400	Interest Theory and Financial Derivatives	C or better in MATH 250	Not Currently Available		

Econometrics & Quantitative Economics as a major

Econometrics & Quantitative Economics majors must earn a minimum 2.0 GPA for major courses. It is strongly recommended that students work closely with their academic advisor to ensure that the proper lower-level courses are completed before the junior year. These courses may serve as prerequisites to later requirements.

Graduate degrees available: Master of Arts in Economics (M.A. ECON), Master of Business Administration (M.B.A.), Master of Science in Economics (M.S. ECON) and Doctor of Philosophy in Economics (Ph.D.).

LEGEND OF ABBREVIATIONS AND TERMS

Abbreviations and terms

- **300- and 400-level College of Business and Analytics elective** - any 300- to 400-level course titled ACCT, BSAN, ECON, FIN, HTEM, MGMT, MKTG or PADM. Lower level courses articulated as upper level courses may not be used to satisfy this requirement
- **Business-prefix courses** - courses designated with these headings: ACCT, BSAN, BUS, ECON, FIN, HTEM, MGMT, MKTG. PADM
- **GPA** - grade point average
- **GR** - grade
- **HRS** - semester hours
- **Sophomore status** - 26-55 hours passed
- **Junior status** - 56-85 hours passed
- **Senior status** - 86 or more hours passed

The use of (3) in HRS column is intended to avoid double-counting; that is, these hours are included in the University Core Curriculum.

The college enforces prerequisites, including class status. Where courses are shown as prerequisites, a passing grade (or higher if required) must be earned in these or equivalent courses prior to the term for which you are registering for the course. Where sophomore, junior or senior status is shown as a prerequisite, total hours passed must equal that status in the term for which you are registered for the course.

PROFESSIONAL BUSINESS CORE AND GPA REQUIREMENTS FOR SPECIFIC MAJORS

Accounting: Students majoring in Accounting must earn a minimum grade of C in ACCT 220 and ACCT 230 (a C- is not sufficient).

Business Analytics: Students majoring in Business Analytics must earn a minimum grade of C in MGMT 345 (a C- is not sufficient).

Finance: Students majoring in Finance must earn a minimum grade of C in ACCT 220, ACCT 230 and FIN 330 (a C- is not sufficient).

Hospitality Tourism, and Event Management: Students majoring in Hospitality, Tourism, and Event Management must earn a minimum grade of C in all courses under this category (a C- is not sufficient).

Management: Students majoring in Management must earn a minimum grade of C in ACCT/ECON/FIN/MGMT 208, MGMT 304, MGMT 318 and MGMT 345 (a C- is not sufficient).

Marketing: Students majoring in Marketing must earn a minimum grade of C in MKTG 304 and ACCT/ECON/FIN/MGMT 208 (a C- is not sufficient).