



## BA, Mathematics/Economics Option

### Major requirements (82-82 credits):

#### Required Courses:

Course Number	Course Name	Credits	Prerequisites	Quarters Offered
Math 161	Calculus I	5	Math 106 and Engl 100	Fall, winter, spring
Math 162	Calculus II	5	Math 161	Fall, winter, spring
Math 163	Calculus III	5	Math 162	Fall, winter, spring
Math 241	Calculus IV	5	Math 163	Fall, spring
Math 225	Foundations of Mathematics	5	Math 161	Fall, winter, spring
Math 231	Linear Algebra	5	Math 106	Fall, winter, spring
Math 345	Numerical Analysis I	4	Math 225 and 231, High-Level Computer Language	Winter (even) Spring (odd)
Math 347	Introductory Differential Equations	4	Math 163	Fall (odd)
Math 385	Probability and an Introduction to Statistics	4	Math 163 and 225,	Fall Winter (odd) Spring (even)
Math 445 or Math 485	Numerical Analysis II Theoretical Probability and Mathematical Statistics	4 4	Math 345 Math 241 and 385	Spring (even) Spring (odd)
Math 494	Senior Seminar	2	prior or concurrent enrollment in Math360 or 432	Winter
CSCD 110 or CPLA 120	Introduction to Programming Computer Applications Literacy	5 5	CPLA 100 or 120, Math 105 (concurrent) or Math Proficiency, CSCD 225 (concurrent)	Fall, Winter, Spring
ECON 200	Introduction to Microeconomics	5	Math 104	Fall, Winter, Spring, Summer
ECON 201	Introduction to Macroeconomics	5	Math 104	Fall, Winter, Spring, Summer
ECON 404	Intermediate Microeconomic Theory	5	Econ 100 and 201	Fall, Winter, Spring
ECON 405	Intermediate Macroeconomic Theory	5	Econ 100 and 201	Fall, Spring
ECON 430	Mathematical Economics	5	Econ 200 or permission	Contact Econ Dept
ECON 437	Econometrics	5	Econ 200, Math 380 or 385 or DSCI 245	Winter

**NOTE: Because this is an interdisciplinary program, it is necessary to consult with an advisor to determine if the courses above may be used to fulfill the GEGR. Students considering graduate study in Mathematical Economics are advised to take MATH 360 and 461.**

## SCHEDULE FOR NEW FRESHMEN

**ASSUMPTIONS:** This assumes that the student is initially placed in college-level English Composition, and Mathematics (advanced placement), and has completed the Foreign Language requirement. Otherwise, the student also may need to take any or all of the following: ENGL 100, Math 103, Math 104, Math 105, Math 106 and courses in a foreign language.

### NEW FRESHMAN FOUR-YEAR SCHEDULE

	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>
<b>Freshman</b>	CPLA 100/101 - 2 cr. MATH 161 - 5 cr. ENGL 101 - 5 cr. ECON 200 - 5 cr. (Counts as a GEGR)	MATH 162 - 5 cr. ENGL 201 - 5 cr. ECON 201 - 5 cr. (Counts as a GEGR)	MATH 163 - 5 cr. GECRs (two) – 10 cr.
<b>Sophomore</b>	MATH 241 – 5 cr. MATH 231 - 5 cr. CSCD 110 or CPLA 120 - 5 cr.	MATH 225 - 5 cr. GECRs (two) – 10 cr.	GECRs – 5 cr. Free Electives – 5-9 cr.
<b>Junior</b>	MATH 347 – 4 cr. ECON 304 - 5 cr. Cultural Diversity – 4-5 cr. Free Elective – 4-5 cr (or MATH 360 - 4 cr)	MATH 345 or 385 - 4 cr. ECON 305 - 5 cr. GECR - 5 cr Free Elective – 4-5 cr. (or MATH 461 - 4 cr)	MATH 345 or 385 - 4 cr. Intern. Studies – 4 cr. Free Elective – 4-5 cr.
<b>Senior</b>	ECON 430 - 5 cr. ITGS 400 - 4 cr. Free Elective – 4-5 cr.	MATH 494 - 2 cr. ECON 437 - 5 cr. Free Electives – 8-10 cr.	MATH 445 or 485 - 4 cr. Free Electives – 10-12 cr.

If the major shown above is your chosen program, you should meet with the Department Chair to plan your first quarter of classes and to be assigned to a departmental adviser. Please contact:

Dr. Christian K. Hansen  
 Department Chair  
 Department of Mathematics  
 Phone (509) 359-6068  
 E-Mail [chansen@mail.ewu.edu](mailto:chansen@mail.ewu.edu)