



**BACHELOR of Science in MATHEMATICAL ECONOMICS (#731)**  
**ACTUARIAL SCIENCE**  
 Department of Mathematics / Department of Economics  
 Ogden College of Science and Engineering / Gordon Ford College of Business  
 Western Kentucky University

The following four-year plan is an example of how to map your program in consultation with your faculty advisor. Every student will finish with a unique plan of his/her own depending on the electives selected.

**Success Markers**

**SAMPLE - 4 year plan**

FIRST YEAR	Fall Semester		Spring Semester	
	MATH 136* – Calculus I (F-QR)	4	MATH 137 – Calculus II	4
	ENGL 100 Introduction to College Writing (F-W1)	3	COMM 145 Fund of Public Speaking & Com (F-OC)	3
	Social & Behavioral Studies (E-SB)	3	Arts & Humanities (E-AH)	3
	HIST 101 World History I OR HIST 102 World History II (F-SB)	3	Natural & Physical Science & Lab (E-NS, SB)	3
	World Language, if needed, OR General Elective	3	ACCT 200 – Introductory Accounting – Financial	3
	<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>

SECOND YEAR	Fall Semester		Spring Semester	
	ECON 202* - Principles of Economics (Micro)	3	ECON 203* - Principles of Economics (Macro)	3
	ECON 206* – Statistics <b>OR</b> STAT 301 – Probability and Applied Statistics	3	MATH 237 – Multivariable Calculus	4
	MATH 307 – Introduction to Linear Algebra	3	CS 170 – Problem Solving and Programming <b>OR</b> CS 180 – Computer Science I	3-4
	MATH 310 – Introduction to Discrete Math	3	ENG 200 Intro to Literature (F-AH)	3
	Natural & Physical Science (E-NS)	3	Connections: Social & Cultural (K-SC)	3
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>

- **World Language Proficiency:** All students entering in fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to: [World Language Proficiency](#).
- **Colonnade Program:** All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to [Colonnade Requirements](#).

THIRD YEAR	Fall Semester		Spring Semester	
	ECON 302 – Microeconomic Theory	3	ECON 303 – Macroeconomic Theory	3
	ECON 307 – Fin Data Modeling	3	ECON 465 – Regression and Econometric Analysis <b>OR</b> ECON 480 – Economic Forecasting <b>OR</b> STAT 401 – Regression Analysis	3
	FIN 330 – Principles of Financial Management	3	FIN 350 – Risk Management and Insurance	3
	MATH 382 – Probability and Statistics I	3	MATH 482 – Probability and Statistics II	3
	ENG 300 Writing in the Disciplines <b>OR</b> COMM 200 Communications Foundations (F-W2)	3	Connections: Systems (K-SY)	3
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>

SUMMER TERM	Summer Term
	It is <b>STRONGLY</b> recommended to pursue an internship in actuarial science after the third year.

FOURTH YEAR	Fall Semester		Spring Semester	
	FIN 332 – Investment Theory	3	ECON 497 <b>OR</b> MATH 497 – Senior Seminar in Mathematical Economics	1
	FIN 437 – Corporate Asset Management	3	FIN 438 – Corporate Funds Management	3
	Colonnade (C-Systems)	3	General Electives	8
	General Elective	3		
	Connections: Local to Global (K-LG)	3		
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>12</b>

**Total Credit Hours:120**

\* Denotes prerequisite courses before admission

**PLEASE NOTE:** Prerequisites, Course Numbers, and Course Titles are subject to change.

Consult your advisor each semester.

Course Descriptions may be viewed at <http://www.wku.edu/catalog>

**FOR ADDITIONAL INFORMATION, PLEASE CONTACT:**

<b>Department:</b>	Mathematics	Economics
<b>Website:</b>	<a href="http://www.wku.edu/math">www.wku.edu/math</a>	<a href="http://www.wku.edu/economics">www.wku.edu/economics</a>
<b>Phone:</b>	(270)745-3651	270-745-2249
<b>Email:</b>	<a href="mailto:math@wku.edu">math@wku.edu</a>	<a href="mailto:econ@wku.edu">econ@wku.edu</a>