

B.S. IN MATHEMATICS - ACTUARIAL SCIENCE CONCENTRATION

College of the Sciences and Mathematics

Curriculum

Code	Title	Credits
General Education Requirements (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
First-Year Experience		4
Academic Foundations		
English Composition requirement		6
Mathematics requirement		3
Interdisciplinary requirement		3
Diverse Communities requirement		3
Distributive Requirements		
Science requirement		6
Behavioral & Social Science requirement		6
Humanities requirement		6
Arts requirement		3
Additional Baccalaureate Requirements		
Writing Emphasis requirement		9
Speaking Emphasis requirement		9
Ethics requirement		3
Major Requirements		
MAT 125	Introduction to Statistics and Probability	3
MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 200	The Nature of Mathematics	3
MAT 261	Calculus III	4
MAT 311	Linear Algebra ¹	3
STA 319	Applied Statistics	3
MAT 343	Differential Equations	3
MAT 371	Mathematics of Finance	3
MAT 421	Mathematical Statistics I	3
MAT 422	Mathematical Statistics II	3
STA 419	Basics of Statistical Learning	3
Related/Cognate Requirements		
Select one of the following:		3
ENG 368	Business and Organizational Writing	
ENG 375	Strategies for Writing in the Workplace	
ENG 371	Technical Writing	
ACC 201	Financial Accounting	3
ECO 111	Principles of Economics (Macro) ¹	3
ECO 112	Principles of Economics (Micro)	3
ECO 340	Intermediate Microeconomics	3
FIN 325	Corporate Finance	3
FIN 330	Principles of Insurance	3
Free Electives or Internship		15
Chosen under advisement		
Capstone Requirement		
MAT 478	Fundamentals of Actuarial Science ²	3
Total Minimum Credits Required		120

¹ Indicates course satisfies a general education requirement.

² This course fulfills the general education Capstone requirement.

All math major courses must be passed with a C or better.

Sample Course Plan

To track their individual degree progress, students are advised to access their Degree Progress Report (DPR) via myWCU regularly. For more information, visit wcupa.edu/DegreeProgressReport (<http://wcupa.edu/degreeprogressreport/>).

The following is a sample suggested course sequence for this program; course offerings and availability are not guaranteed. Students should consult their academic advisor with any questions.

Course	Title	Credits
Year One		
Fall		
MAT 125	Introduction to Statistics and Probability	3
MAT 161	Calculus I	4
ECO 112	Principles of Economics (Micro)	3
WRT 120	Effective Writing I	3
or	or Effective Writing with Supplemental	
WRT 123	Writing Workshop	
FYE 100X	First Year Experience	4
Credits		17
Spring		
MAT 162	Calculus II	4
MAT 200	The Nature of Mathematics	3
ECO 111	Principles of Economics (Macro)	3
Science Gen Ed		3
Behavioral/Social Science Gen Ed		3
Credits		16
Year Two		
Fall		
MAT 261	Calculus III ¹	4
MAT 311	Linear Algebra	3
MAT 371	Mathematics of Finance	3
ACC 201	Financial Accounting	3
WRT 2XX	200-Level WRT Course	3
Credits		16
Spring		
MAT 421	Mathematical Statistics I ¹	3
STA 319	Applied Statistics	3
FIN 325	Corporate Finance	3
Science Gen Ed		3
Free Elective ³		3
Credits		15
Year Three		
Fall		
STA 419	Basics of Statistical Learning	3
FIN 330	Principles of Insurance	3
IW Course		3
Humanities Gen Ed		3
Free Elective ³		3
Credits		15
Spring		
MAT 343	Differential Equations	3
MAT 422	Mathematical Statistics II	3
ECO 340	Intermediate Microeconomics	3

JW Course		3
Free Elective ³		3
Credits		15
Year Four		
Fall		
ENG 368	Business and Organizational Writing (W)	3
or	or Technical Writing	
ENG 371	or Strategies for Writing in the	
or	Workplace	
ENG 375		
Arts Gen Ed		3
Humanities Gen Ed		3
Free Elective ³		3
Free Elective ³		3
Credits		15
Spring		
MAT 478	Fundamentals of Actuarial Science	3
MAT 491	Internship in Applied Mathematics ²	2-4
	or Free Elective	
Free Elective ³		3
Free Elective ³		3
Credits		11-13
Total Credits		120-122

¹ MAT 421 should be taken immediately after MAT 261.

² May be taken for variable credit and repeated for credit.

³ Must be approved by advisor.