STATISTICS-BA OR BS WITH ACTUARIAL SCIENCES EMPHASIS

This is a **General** curriculum guide and is not applicable to every student. It is important to meet with your advisor.

This guide assumes a placement into MTH 201 — Calculus I

	Year	· One	
MTH 201 Calculus I	4	MTH 202 Calculus II	4
Prerequisites: MTH 122 and MTH 123 or proficiency through		Prerequisites: MTH 201	
math placement		STA 312 Probability and Statistics	3
WRT 098 (self-placement)⁴ or Gen Ed	3/4	Prerequisites: MTH 201	
Gen Ed or Language (if BA)	3/4	Gen Ed or Language (if BA)	3/4
Gen Ed	3	WRT 150 Strategies in Writing⁴	4
Total	13-15	Total	14-15
	Year	Two	u .
CIS 161 Computational Science (prerequisite MTH 201)	3/4	STA 321 Applied Regression (Prereq: STA 216)	3
OR CIS 160 Programming with Visual Basic		MTH 227 Linear Algebra I	3
OR CIS 162 Computer Science I		Prerequisites: MTH 202	
Prerequisite: MTH 110		Application Cognate – see page 2 for requirements	3
STA 216 Intermediate Applied Statistics	3	Gen Ed	3
Prerequisite: STA 215 or STA 312		Gen Ed	3
Application Cognate – see page 2 for requirements	3		
Gen Ed or Language (if BA)	3/4		
Gen Ed or ¹ Elective	3		
Total	15-16*	Total	15
Year Three			
STA 318 Statistical Computing (Prereq: STA 215)	3	STA 311 Introduction to Survey Sampling (Prereq: STA 216)	3
OR		Application Cognate – see page 2 for requirements	3
STA 418 Statistical Computing w/R		Application Cognate – see page 2 for requirements	3
Prereq: STA 215 or STA 220 or STA 312 AND STA 216 or CIS		Gen Ed	3
162 or CIS 261		Issue	3
¹ Elective	3		
¹ Elective	3		
Gen Ed	3		
Issue	3	T	45
Total	15	Total	15
STA 412 Mathematical Statistics I	Year 4	Four CTA 410 Statistics Project (SIMS) ³	3
Prerequisites: STA 215 or STA 312, and MTH 202	4	STA 419 Statistics Project (SWS) ³ Prerequisite: STA 216	3
Application Cognate – see page 2 for requirements		STA 415 Mathematical Statistics II (Capstone)	
Application Cognate – see page 2 for requirements Application Cognate – see page 2 for requirements	3	Prerequisites: STA 412 and MTH 227	4
¹ Elective	3	STA 425 Actuarial Probability and Statistics	
Elective	3	Prerequisite: STA 412	3
	3	¹Elective	3
T-1	1.0*		3
Total	16*	Total	16*

Notes and Recommendations:

- * The block tuition rate is for 12-15 credits. You will pay additional tuition for any credits over 15.
- ¹ Elective refers to any course to help you earn the required 120 credits to graduate.

Students who are interested in taking the first actuarial exams between third and fourth year, should consult with their Statistics faculty advisor to determine appropriate courses to take in the third year in preparation for the exams.

Online at: http://www.gvsu.edu/clasadvising

² Students who self-place into WRT 098 should take this course in the fall semester and then take WRT 150 in the winter semester of the first year. Students who self-place into WRT 150 should take this course in the winter semester of the first year. A grade of C or higher is required to fulfill the WRT 150 requirement.

³Students must complete a total of two courses with an SWS attribute. One SWS course should be outside the major.

Bachelor of Arts/Bachelor of Science Degree Requirements

Statistics students can pursue a Bachelor of Arts or Bachelor of Science degree. Students who wish to obtain a BA must fulfill 3rd semester proficiency in a foreign language (201 level). The BS requirements are incorporated into the major requirements and include CIS 160, 161, or 162, MTH 201, and MTH 202.

Declaring the Statistics Major:

- 1. Log into myBanner from the GVSU homepage
- 2. Once logged in, select "Student," "Student Records," and then "Change Major"
- 3. Click on the "Change Major 1/Program" box
- 4. Click on the down arrow in the box next to "New Major 1/Program"
- 5. From here scroll down and choose "Statistics-BA OR BS" depending on your degree.
- 6. Click "Submit" and then click "Change to New Program"

General Education Overlap

General Education Categories fulfilled by the Statistics Major:

Mathematical Sciences: MTH 122 or MTH 123 or MTH 201 or STA 215

Application Cognates

All Students Must Complete 15 – 18 Credit Hours

ACC 212 – Principles of Financial Accounting (3)

FIN 320 – Managerial Finance (3)

Prerequisite: ACC 212 and MTH 110 or 122 or 201

FIN 321 – Investments (3)

Prerequisite: FIN 320 and STA 215 FIN 331 – Risk and Insurance (3)

Prerequisite: Junior Standing

Choose one Economics Option from:

ECO 200 – Business Economics (3)

Prerequisite: MTH 110, 122 or 201 and sophomore standing

OR Both (recommended)

ECO 210 – Macroeconomics (3)

Prerequisite: MTH 110, 122 or 201 and sophomore standing

AND

ECO 211 - Microeconomics (3)

Prerequisite: MTH 110, 122 or 201 and sophomore standing