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 IS FOR STUDENTS WHO ARE STARTING IN MTH 110

	Year	r One	
MTH 110 Algebra	4	MTH 124 Precalculus: Functions and Models	5
Gen Ed or WRT 098 (self-placement) ⁴	3/4	Prerequisite: MTH 110 or proficiency through math	
Gen Ed or Language (if BA)	3/4	placement	
Gen Ed	3	SEE NOTE BELOW REGARDING OPTIONS FOR THIS	
Gen Ed	3	COURSE	
		STA 215 Introductory Applied Statistics	3
		Prerequisite: MTH 110 or equivalent	
		Gen Ed or Language (if BA)	3/4
		WRT 150 Strategies in Writing⁴	4
Total	13-16	Total	15-16*
	Year	Two	
MTH 201 Calculus I	4	MTH 202 Calculus II (prerequisite MTH 201)	4
Prerequisites: MTH 122 and MTH 123; MTH 124 or proficiency		CIS 161 Computational Science (prerequisite MTH 201)	3/4
through math placement		OR CIS 160 Programming with Visual Basic	
STA 216 Intermediate Applied Statistics	3	OR CIS 162 Computer Science I	
Prerequisite: STA 215 or STA 312		Prerequisite: MTH 110	
Gen Ed or Language (if BA)	3/4	Application Cognate – see page 2 for requirements	3
Application Cognate – see page 2 for requirements	3	Gen Ed	3
¹ Elective	3	¹Elective	3
Total	16	Total	16
	Year	Three	
STA 321 Applied Regression (Prereq: STA 216)	3	STA 311 Introduction to Survey Sampling (Prereq: STA 216)	3
STA 318 Statistical Computing (Prereq: STA 215)		Application Cognate – see page 2 for requirements	3
OR		Application Cognate – see page 2 for requirements	3
STA 418 Statistical Computing w/R		Gen Ed	3
Prereq: STA 215 or STA 220 or STA 312 AND STA 216 or CIS		Issue	3
162 or CIS 261	3		
MTH 227 Linear Algebra I	3		
Gen Ed	3		
Issue	3		
Total	15	Total	15
	Year	Four	
STA 412 Mathematical Statistics I	4	STA 419 Statistics Project (SWS) ³	3
Prerequisites: STA 215 or STA 312, and MTH 202		Prerequisite: STA 216	4
Application Cognate – see page 2 for requirements	3	STA 415 Mathematical Statistics II (Capstone)	
Application Cognate – see page 2 for requirements	3	Prerequisites: STA 412 and MTH 227	3
¹ Elective	3	STA 425 Actuarial Probability and Statistics	3
	3	Prerequisite: STA 412	3
		¹ Elective	
Total	16*	Total	16*

^{*} The block tuition rate is for 12-15 credits. You will pay additional tuition for any credits over 15.

MTH 124 is designed for calculus-bound students as a replacement for MTH 122 & 123. While students can still fulfill the MTH 201 prerequisite by taking MTH 122 & 123, MTH 124 is strongly recommended.

¹ Elective refers to any course to help you earn the required 120 credits to graduate.

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 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 124 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

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