COLLEGE OF LIBERAL ARTS AND SCIENCES (CLAS) ACADEMIC ADVISING CENTER 2023-2024

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 One			
MTH 110 Algebra	4	MTH 124 Precalculus: Functions and Models GE Math	5
Gen Ed GE Historical Analysis or [1]WRT 120 (self-placement)	3/4	Prerequisite: MTH 110 or proficiency through math placement	
Gen Ed GE Social/Behavioral or Language (if BA)	3/4	**SEE NOTE BELOW REGARDING OPTIONS FOR THIS COURSE**	
Gen Ed GE Physical Science	3	STA 215 Introductory Applied Statistics	3
Gen Ed GE Art	3	Prerequisite: MTH 110 or equivalent	
		Gen Ed GE Life Science or Language (if BA)	3/4
		[1]WRT 130 or 150 GE Writing	3/4
		[2]Elective (if necessary)	1
Total	*13/16**	*Total*	*14/15*
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 through math placement		CIS 161 Computational Science (prerequisite MTH 201)	3/4
STA 216 Intermediate Applied Statistics	3	OR CIS 160 Learn to Code in Python	
Prerequisite: STA 215 or STA 312		OR CIS 162 Computer Science I	
Gen Ed or Language (if BA)	3/4	Prerequisite: MTH 110	
CIS 231 Problem Solving Using Spreadsheets (prerequisite to FIN 320)	3	ECO 210 Introductory Macroeconomics GE Social/Behavioral	3
[2]Elective	1-2	Gen Ed GE Philosophy and Literature	3
		[2]Elective	3
Total	*14/15*	*Total*	*14/16**
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)	3	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 GE Global Perspectives	3
Prereq: STA 215 or STA 220 or STA 312 AND STA 216 or CIS 162		Issue	3
MTH 204 Linear Algebra I	3		
Prerequisites: MTH 122 and 123; or MTH 124; or proficiency through math placement			
ECO 211 Introductory Microeconomics	3		
Issue	3		
Total	*15*	*Total*	*15*
Year Four			
STA 412 Mathematical Statistics I	4	[3]STA 419 Statistics Project **(SWS)**	3
Prerequisites: STA 215 or STA 312, and MTH 202		Prerequisite: Prerequisites: Gen Ed Foundations – Writing, STA 216, and 2 of STA 301, STA 310, STA 311, STA 314, STA 315, STA 317, STA 318, and STA 321.	
Application Cognate – see page 2 for requirements	3		
Application Cognate – see page 2 for requirements	3		
Gen Ed GE US Diversity	3	STA 415 Mathematical Statistics II (Capstone)	
[2]Elective	3	Prerequisites: STA 412 and MTH 204	4
		STA 425 Actuarial Probability and Statistics	
		Prerequisite: STA 412	3
		[2]Elective	3
			3
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.

It is imperative to meet with your faculty advisor and an advisor in the CLAS Academic Advising Center regularly.
The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.
Online at: http://www.gvsu.edu/clasadvising

[1] Students who self-place into WRT 120 should take this course in the fall semester and then take WRT 130 in the winter semester of their first year. Students who self-place into WRT 150 can take in either semester during their first year. Students will not need to take WRT 150 if they have earned credit for the course through AP/Dual Enrollment. A grade of C or better is required in WRT 130 or 150 in order to satisfy the WRT requirement at GVSU.
[2]Elective refers to any course to help you earn the required 120 credits to graduate.
[3]Students must complete a total of two courses with an SWS attribute. One SWS course should be outside the major.

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.

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.

To earn a degree from GVSU, all students must complete the following: 120 total credits, all major/minor requirements, all general education requirements, at least 58 credits from a 4-year institution, and the last 30 credits of the degree completed through GVSU.

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-Actuarial Emphasis-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
Social Behavioral Sciences: option of ECO 210 or ECO 211 (for Actuarial Science Emphasis)

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, CIS 221 or 231, and MTH 110 or 122 or 201 – Permit required
FIN 321 – Investments (3) Prerequisite: FIN 320 and STA 215 – Permit Required
FIN 331 – Risk and Insurance (3) Prerequisite: Junior Standing – Permit Required
Choose one Economics Option from:
ECO 200 – Business Economics (3) Prerequisite: MTH 110, 122 or 201 and sophomore standing
OR Both
ECO 210 – Introductory Macroeconomics (3) Prerequisite: MTH 110, 122 or 201 and sophomore standing
AND
ECO 211 – Introductory Microeconomics (3) Prerequisite: MTH 110, 122 or 201 and sophomore standing