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

STATISTICS-BA OR BS

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 GE Math Prerequisites: MTH 122 and MTH 123; MTH 124 or proficiency through math placement	4	MTH 202 Calculus II Prerequisites: MTH 201	4
Gen Ed GE Historical Analysis or [1]WRT 120 (self-placement)	3	STA 215 Introductory Applied Statistics Prerequisite: MTH 110 or equivalent	3
Gen Ed GE Social/Behavioral or Language (if BA)	3/4	**OR**	
Gen Ed GE Physical Science	3	STA 312 Probability and Statistics Prerequisites: MTH 201	
[2]Elective	1-2	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	*15*	*Total*	*15*
Year Two			
CIS 161 Computational Science (prerequisite MTH 201) OR CIS 160 Learn to Code in Python OR CIS 162 Computer Science I Prerequisite: MTH 110	3/4	**MTH 204** Linear Algebra I Prerequisites: MTH 122 and 123; or MTH 124; or proficiency through math placement	3
STA 216 Intermediate Applied Statistics Prerequisite: STA 215 or STA 312	3	[2]Elective	3
Gen Ed or Language (if BA)	3	[2]Elective	3
Gen Ed GE Philosophy and Literature	3	Gen Ed GE Social/Behavioral	3
[2]Elective	3	Gen Ed GE Global Perspectives	3
Total	*15-16**	*Total*	*15*
Year Three			
[3]STA 311 Introduction to Survey Sampling (Prereq: STA 216) **OR** [3]STA 315 Design of Experiments (Prereq: STA 216 or STA 314) **OR** [3]STA 321 Applied Regression (Prereq: STA 216)	3	[3]STA 311 Introduction to Survey Sampling (Prereq: STA 216) **OR** [3]STA 315 Design of Experiments (Prereq: STA 216 or STA 314) **OR** [3]STA 321 Applied Regression (Prereq: STA 216)	3
[4]STA Elective	3	[4]STA Elective	3
[2]Elective	3	[2]Elective	3
Gen Ed GE Art	3	Gen Ed GE US Diversity	3
Issue	3	Issue	3
Total	*15*	*Total*	*15*
Year Four			
STA 412 Mathematical Statistics I Prerequisites: STA 215 or STA 312, and MTH 202	4	[6]STA 419 Statistics Project **(SWS)** 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.	3
[5]STA Application Course	3	STA 415 Mathematical Statistics II (Capstone) Prerequisites: STA 412 and MTH 204	4
[2]Elective	3	[5]STA Application Course	3
[2]Elective	3	[2]Elective	3
[2]Elective	1-2	[2]Elective	1-2
Total	*14/15*	*Total*	*14/15*

Notes and Recommendations:

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

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 select two courses from the following: STA 311 Introduction to Survey Sampling, STA 315 Design of Experiments and STA 321 Applied Regression. If students choose to take all three courses, one will count as one of the two Statistics Electives in the major.
[4]Students must complete two statistic elective courses. See below for elective options.
[5]Each major in statistics must select an area of application consisting of at least six credits from outside the statistics department. Students MUST meet with their statistics faculty advisor to develop specific plans for their application cognates. Students are encouraged to meet with their advisor as soon as their major in statistics is declared.
[6] Students 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.

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-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

Statistics Elective Courses Choose TWO of the following courses	
STA 301 Questionnaire Design and Execution (3) Prerequisite: STA 215 or STA 312 STA 310 Introduction to Biostatistics (3) Prerequisite: STA 216 STA 314 Statistical Quality Methods (3) Prerequisite: STA 215 or EGR 103 STA 317 Nonparametric Statistical Analysis (3) Prerequisite: STA 216 STA 318 Statistical Computing (3) Prerequisite: STA 215	STA 380 Special Topics in Statistics (3) STA 426 Multivariate Data Analysis (3) Prerequisite: STA 216 STA 418 Statistical Computing & Graphics w/R (3) Prerequisite: STA 215 or STA 220 or STA 312 AND STA 216 or CS 162 or CIS 261 STA 421 Bayesian Data Analysis (3) Prerequisite: STA 216 STA 425 Actuarial Probability and Statistics (3) Prerequisite: STA 412

Application Cognates: For a list of the approved application cognates for the Statistics major, please visit the Statistics website: https://www.gvsu.edu/stat/application-cognate-courses-68.htm