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	4	MTH 202 Calculus II		4
Prerequisites: MTH 122 and MTH 123 or proficiency through math placement		Prerequisites: MTH 201		
		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 Writing[4]		4
Total	*13-15*	*Total*		*14-15*
Year Two				
CIS 161 Computational Science (prerequisite MTH 201)	3/4	MTH 227 Linear Algebra I		3
OR CIS 160 Programming with Visual Basic		Prerequisites: MTH 202		
OR CIS 162 Computer Science I		Electives[1]		3
Prerequisite: MTH 110		Electives[1]		3
STA 216 Intermediate Applied Statistics	3	Gen Ed		3
Prerequisite: STA 215 or STA 312		Gen Ed		3
Gen Ed or Language (if BA)	3			
Gen Ed	3			
[1]Elective	3			
Total	*15-16**	*Total*		*15*
Year Three				
[6]STA 311 Introduction to Survey Sampling (Prereq: STA 216)	3	[6]STA 311 Introduction to Survey Sampling (Prereq: STA 216)		3
OR		**OR**		
[6]STA 315 Design of Experiments (Prereq: STA 216 or STA 314)		[6]STA 315 Design of Experiments (Prereq: STA 216 or STA 314)		
OR		**OR**		
[6]STA 321 Applied Regression (Prereq: STA 216)		[6]STA 321 Applied Regression (Prereq: STA 216)		
[2]STA Elective	3	[2]STA Elective		3
[1]Elective	3	[1]Elective		3
Gen Ed	3	Gen Ed		3
Issue	3	Issue		3
Total	*15*	*Total*		*15*
Year Four				
STA 412 Mathematical Statistics I	4	STA 419 Statistics Project **(SWS)[5]**		3
Prerequisites: STA 215 or STA 312, and MTH 202		Prerequisite: STA 216		
[2]STA Elective	3	STA 415 Mathematical Statistics II (Capstone)		4
[3]STA Application Course	3	Prerequisites: STA 412 and MTH 227		
[1]Elective	3	[3]STA Application Course		3
[1]Elective	3	[1]Elective		3
		[1]Elective		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.

[2] Students must complete two statistic elective courses. See reverse side for elective options.

[3] 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.

[4]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.

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

It is imperative to meet with your faculty advisor and an advisor in the CLAS Academic Advising Center regularly.

Your contact person in the CLAS Academic Advising Center is Betty Schaner (schanerb@gvsu.edu)

The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.

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

[6]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.

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

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 416 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

Application Cognates: For a list of the approved application cognates for the Statistics major, please visit the Statistics website: http://www.gvsu.edu/cms4/asset/778479D3-07DF-084E-09FD89BDE51017EA/applicationcognatecourses_2016.pdf