# 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.

| Year One | | | |
|---|---|---|---|
| MTH 110 Algebra | 4 | MTH 122 College Algebra | 3 |
| WRT 150 Strategies of Writing *Gen Ed* | 4 | Prerequisite: MTH 110 or assignment through Grand Valley math placement exam | |
| Gen Ed or Language (if BA) | 3/4 | MTH 123 Trigonometry | 3 |
| Gen Ed | 3 | Prerequisite: MTH 122 or concurrent enrollment or assignment through Grand Valley math placement exam | |
| | | CIS 160 Programming with Visual Basic | 3 |
| | | OR CIS 162 Computer Science I | 4 |
| | | Prerequisites: MTH 110 | |
| | | Gen Ed or Language (if BA) | 3/4 |
| | | Elective[1] | 3 |
| *Total* | 14 | *Total* | *15-16\** |

| Year Two | | | |
|---|---|---|---|
| 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 215 Introductory Applied Statistics | 3 | STA 216 Intermediate Applied Statistics | 3 |
| Prerequisite: MTH 110 or equivalent | | Prerequisite: STA 215 or STA 312 | |
| Gen Ed or Language (if BA) | 3 | [1]Elective | 3 |
| Gen Ed | 3 | Gen Ed | 3 |
| [1]Elective | 3 | Gen Ed | 3 |
| *Total* | 16 | *Total* | 16 |

| Year Three | | | |
|---|---|---|---|
| STA 315 Design of Experiments | 3 | STA 311 Introduction to Survey Sampling | 3 |
| Prerequisite: STA 216 or STA 314 | | Prerequisite: STA 216 | |
| [2]STA Elective | 3 | MTH 227 Linear Algebra I | 3 |
| [1]Elective | 3 | Prerequisite: MTH 202 | |
| Gen Ed | 3 | [1]Elective | 3 |
| Issue/Theme | 3 | Gen Ed | 3 |
| | | Issue/Theme | 3 |
| *Total* | 15 | *Total* | 15 |

| Year Four | | | |
|---|---|---|---|
| STA 412 Mathematical Statistics I | 4 | STA 319 Statistics Project | 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\** |

\* 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 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.

Students must complete a total of two courses with an SWS attribute

**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**

Statistics students can pursue a Bachelor of Arts or Bachelor of Science degree.  Students who wish to obtain a BA must fulfill 3<sup>rd</sup> 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 201 or STA 215 |

| **Statistics Elective Courses**<br>Choose TWO of the following courses |
| --- |
| STA 310 Introduction to Biostatistics (3)<br>    Prerequisite: STA 216 |
| STA 314 Statistical Quality Methods (3)<br>    Prerequisite: STA 215 or EGR 103 |
| STA 317 Nonparametric Statistical Analysis (3)<br>    Prerequisite: STA 216 |
| STA 318 Statistical Computing (3)<br>    Prerequisite: STA 215 |
| STA 321 Applied Regression Analysis  (3)<br>    Prerequisite: STA 216 |
| STA 416 Multivariate Data Analysis (3)<br>    Prerequisite: STA 216 |
| STA 421 Bayesian Data Analysis (3)<br>    Prerequisite: STA 216 |