The Department of

# Mathematics and Statistics

## Statistics Major

Chair: Timothy Feeman, Ph.D.
Office Location: 305 Saint Augustine Center
Telephone: 610-519-4850
Website

## About

A major in Statistics provides students with the statistical expertise needed to secure employment in statistics and related fields, such as data science and biostatistics.

## Required Major Courses (55 credits)

| Course | Title | Credits |
|---|---|---|
| MAT 1000 | Math and Stat Communities | 1 |
| MAT 1500 | Calculus I | 4 |
| MAT 1505 | Calculus II | 4 |
| MAT 2500 | Calculus III | 4 |
| | Linear Algebra Course | 3 |
| STAT 4310 | Stat Methods | 3 |
| STAT 4315 | Applied Statistical Models | 3 |
| STAT 4380 | Data Science | 3 |
| STAT 5700 | Probability | 3 |
| STAT 5705 | Theory of Stat Inference | 3 |
| CSC 1051 | Algorithms & Data Struc I | 4 |
| | Statistics Major Electives | 9 |
| | Statistics Natural Science Elective | 8 |
| STAT 5905 | Seminar in Statistics | 3 |

# Core Curriculum Requirements (33 credits)

Statistics Majors meet the following core requirements in the major and therefore are omitted from the summary below:

- Core Math (3 cr)
- Natural Science (8 cr)

| Course | Title | Credits |
|---|---|---|
| ACS 1000 | Ancients | 3 |
| ACS 1001 | Moderns | 3 |
| THL 1000 | Faith, Reason, and Culture | 3 |
| PHI 1000 | Knowledge, Reality, Self | 3 |
| ETH 2050 | The Good Life:Eth & Cont Prob | 3 |
| | Literature and Writing Seminar (1 course) | 3 |
| | History (1 course) | 3 |
| | Social Sciences (2 courses) | 6 |
| | Fine Arts (1 course) | 3 |
| | Upper-Level Theology (1 course) | 3 |
| | Language Requirement | |
| | Diversity Requirement (2 courses) | |

# Free Elective Requirement (34 credits)

Students with a Statistics primary major have thirty-four (34) required free elective credits.

# Degree Credit Summary

- **Major Credits:** 55 credits
- **Core Credits:** 33 credits
- **Free Electives Credits:** 34 credits
- **Total Required Credits:** 122 Credits

*Note: The above credit totals are based on the minimum number of required credits in each degree area. The minimum number of required credits in each area listed above must be met. Credits taken beyond the required minimum for one area may not be applied to another area.*

# SECONDARY MAJOR

Students who declare Statistics as a **secondary major** must complete the Required Major Courses to achieve this major. Students are able to count any eligible course taken in their primary major, the core curriculum, minors, concentrations, or free electives toward these requirements.