## Mathematics, A.S.

## General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef/)
NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

| Code | Title | Hours |
| :---: | :---: | :---: |
| General Education Foundations |  |  |
| F1-Composition \& Rhetoric |  | 3-6 |
| ENGL 101 \& ENGL 102 or ENGL 103 | Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing |  |
| F2A/F2B - Science \& Technology |  | 4-6 |
| F3-Math \& Quantitative Reasoning |  | 3-4 |
| F4 - Society \& Connections |  | 3 |
| F5-Human Inquiry \& the Past |  | 3 |
| F6-The Arts \& Creativity |  | 3 |
| F7- Global Studies \& Diversity |  | 3 |
| F8-Focus (may be satisfied by completion of a minor, double major, or dual degree) |  | 9 |
| Total Hours |  | 31-37 |

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

## Curriculum Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| GEF Elective Requirements (2, 4, 5, 6, 7, and 8) | $\mathbf{2 2}$ |  |
| ENGL 101 | Introduction to Composition and Rhetoric | 6 |
| \& ENGL 102 | and Composition, Rhetoric, and Research (GEF 1) |  |
| MATH 155 | Calculus 1 (GEF 3) | 4 |
| MATH 156 | Calculus 2 (GEF 8) | 4 |
| MATH 251 | Multivariable Calculus | 4 |
| MATH 261 | Elementary Differential Equations | 4 |
| WVUE 191 | First Year Seminar | 4 |
| Elective |  | 1 |
| Total Hours |  | 15 |

## Suggested Plan of Study

| First Year |  |  |
| :--- | :--- | ---: |
| Fall | Hours | Spring |
| MATH 155 (GEF 3) | 4 ENGL 101 (GEF 1) | Hours |
| WVUE 191 | 1 MATH 156 (GEF 8) | 3 |
| GEF Elective (GEF 4) | 3 GEF Elective (GEF 6) | 4 |
| GEF Elective (GEF 5) | 3 Elective | 3 |
| Elective | 3 | 6 |
|  | 14 | 16 |

## Second Year

Fall

## Hours

Spring
Hours
ENGL 102 (GEF 1)
3 MATH 261
MATH 251
4 GEF Elective (GEF 8)

| GEF Elective (GEF 2) | 4 GEF Elective (GEF 8) |  |
| :--- | :--- | :--- |
| GEF Elective (GEF 7) | 3 Elective |  |
|  | 14 | 16 |

Total credit hours: 60

## Major Learning Outcomes

## MATHEMATICS

Upon successful completion of the A.S. degree, Mathematics majors will be able to:

1. Describe the fundamental concepts in a breadth of topics in mathematics.
2. Use basic skills in specific mathematics topics (Algebra, Trigonometry, Calculus, and Differential Equations).
3. Apply mathematical knowledge to a variety of areas and professions.
4. Construct mathematical models to solve problems.
5. Transfer into a bachelor degree program in mathematics.
