# Degree Worksheet for the College of Arts and Sciences: 2022-2023 MATHEMATICS MINORS MATHEMATICS - APPLIED MATHEMATICS - STATISTICS 

## MINOR in MATHEMATICS: 24 CREDITS

LOWER DIVISION

| MATH 157 | Calculus \& Analytical Geometry I | Credits |  |
| :--- | :--- | :--- | :--- |
| Mrade |  |  |  |
| MATH 258 | Calculus \& Analytical Geometry II | 4 |  |
| MATH 259 | Calculus \& Analytical Geometry III | 4 |  |

The Mathematics Minor is only available to students who are not majoring in Mathematics or Applied Mathematics.

Students may not obtain more than one minor from the following: Mathematics, Applied Mathematics, Statistics.

| UPPER DIVISION |  |  |
| :---: | :---: | :---: |
|  | Credits Grade |  |
| MATH 301 Fundamentals of Mathematics | 3 |  |
| Select one of the following 2 courses: | 3 credits |  |
| MATH 335 Applied Linear Algebra | 3 |  |
| MATH 339 Linear Algebra | 3 |  |
| One Mathematics 300-400 level elective*: | 3 credits |  |
| MATH | 3 |  |
| One Mathematics 400-level elective: | 3 credits |  |
| MATH | 3 |  |

Cannot double-count electives with another requirement.
*MATH 260 may be used as one 300-400 level elective.
A maximum of three (3) credits from the following courses may be counted toward Mathematics electives:
MATH 365 (can be taken only once), MATH 390, 490, 497.
MATH 335, 339, 432, and 499 cannot be used for elective credit.
Check for pre-requisites when selecting electives.

## MINOR in APPLIED MATHEMATICS: 24 CREDITS

LOWER DIVISION

|  |  | Credits Grade |  |
| :--- | :--- | :---: | :--- |
|  |  |  |  |
| MATH 157 | Calculus \& Analytical Geometry I | 4 |  |
| MATH 258 | Calculus \& Analytical Geometry II | 4 |  |
| MATH 259 | Calculus \& Analytical Geometry III | 4 |  |
| MATH 260 | Ordinary Differential Equations | 3 |  |

## UPPER DIVISION

| One of the following two courses: | 3 credits Credits Grade |  |
| :---: | :---: | :---: |
| MATH 335 Applied Linear Algebra | 3 |  |
| MATH 339 Linear Algebra | 3 |  |
| One of the following three courses: | 3 credits |  |
| MATH 440 Foundations of Applied Math | 3 |  |
| MATH 454 Partial Differential Equations | 3 |  |
| MATH 462 Nonlinear Systems \& Chaos | 3 |  |
| One 300-400 level Mathematics elect MATH | 3 |  |

Cannot double-count electives with another requirement.
*MATH 260 may be used as one 300-400 level elective.
A maximum of three (3) credits from the following courses may be counted toward Mathematics electives:
MATH 365 (can be taken only once), MATH 390, 490, 497.
MATH 335, 339, 432, and 499 cannot be used for elective credit.
Check for pre-requisites when selecting electives.

# Degree Worksheet for the College of Arts and Sciences: 2022-2023 MATHEMATICS MINORS MATHEMATICS - APPLIED MATHEMATICS - STATISTICS 

## MINOR in STATISTICS: 23 CREDITS

LOWER DIVISION

MATH 157
Calculus \& Analytical Geometry I

| UPPER DIVISION |  |  |
| :---: | :---: | :---: |
| One of the following two courses: | 3 credits Credits Grade |  |
| MATH 335 Applied Linear Algebra | 3 |  |
| MATH 339 Linear Algebra | 3 |  |
| One of the following two courses: | 3 credits |  |
| MATH 321 Statistics for Experimentalists | 3 |  |
| MATH 422 Mathematical Statistics* | 3 |  |
| *MATH 421 is a pre-requisite for MATH 422 |  |  |
| One of the following two courses: <br> MATH 425 Applied Statistical Models | 3 credits |  |
|  | 3 |  |
| MATH 426 Experimental Design | 3 |  |
| Statistics Electives: |  |  |
| Select any two from the following, at least one of which must be MATH: |  |  |
| MATH 421 Probability Theory | 3 |  |
| MATH 422 Mathematical Statistics | 3 |  |
| MATH 423 Stochastic Processes | 3 |  |
| MATH 426 Experimental Design | 3 |  |
| ECON 355 Regression Analysis | 3 |  |
| ECON 451 Econometrics | 3 |  |
| ECON 452 Time Series Analysis | 3 |  |
| CPSC 322 Data Science Algorithms | 3 |  |
| CPSC 323 Machine Learning \& Intelligent Systems | 3 |  |
| CPSC 324 Big Data Analytics | 3 |  |
| PHYS 450 Statistical Physics | 3 |  |
| or any course with significant probability or statistics content with prior approval of the MATH department chair |  |  |

NOTE: ALL of these statistics elective courses have pre-requisites; some selections require courses to be taken outside of this minor.

Cannot double-count electives with courses used elsewhere.
Check for pre-requisites when selecting electives.

The Statistics Minor is only available to students who are not majoring in Mathematics or Applied Mathematics.
Students may not obtain more than one minor from the following: Mathematics, Applied Mathematics, Statistics.

