

# Degree Worksheet for the College of Arts and Sciences: 2023-2024

## MATHEMATICS MINORS

### MATHEMATICS - APPLIED MATHEMATICS - STATISTICS

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#### MINOR in 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	

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.

**Check for pre-requisites when selecting electives.**

##### UPPER DIVISION

	Credits	Grade
MATH 301 Fundamentals of Mathematics	3	
<b>Select one of the following 2 courses:</b>	<b>3 credits</b>	
MATH 335 Applied Linear Algebra	3	
MATH 339 Linear Algebra	3	

<b>One Mathematics 300-400 level elective*:</b>	<b>3 credits</b>	
MATH	3	

<b>One Mathematics 400-level elective:</b>	<b>3 credits</b>	
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, 496, 499 cannot be used as Math 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	

The Applied 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.

**Check for pre-requisites when selecting electives.**

##### UPPER DIVISION

<b>One of the following two courses:</b>	<b>3 credits</b>	
MATH 335 Applied Linear Algebra	3	
MATH 339 Linear Algebra	3	

<b>One of the following three courses:</b>	<b>3 credits</b>	
MATH 440 Foundations of Applied Math	3	
MATH 454 Partial Differential Equations	3	
MATH 462 Nonlinear Systems & Chaos	3	

<b>One 300-400 level Mathematics elective:</b>		
MATH	3	

Cannot double-count electives with another requirement.

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, 496, 499 cannot be used as Math electives.

# Degree Worksheet for the College of Arts and Sciences: 2023-2024

## MATHEMATICS MINORS

### MATHEMATICS - APPLIED MATHEMATICS - STATISTICS

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#### MINOR in STATISTICS: 23 CREDITS

##### LOWER DIVISION

		Credits	Grade
MATH 157	Calculus & Analytical Geometry I	4	
MATH 258	Calculus & Analytical Geometry II	4	

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.

**Check for pre-requisites when selecting electives.**

##### UPPER DIVISION

<b>One of the following two courses:</b>		<b>3 credits</b>	
		Credits	Grade
MATH 335	Applied Linear Algebra	3	
MATH 339	Linear Algebra	3	

<b>One of the following two courses:</b>		<b>3 credits</b>	
		Credits	Grade
MATH 321	Statistics for Experimentalists	3	
MATH 422	Mathematical Statistics*	3	

\*MATH 421 is a pre-requisite for MATH 422

<b>One of the following two courses:</b>		<b>3 credits</b>	
		Credits	Grade
MATH 425	Applied Statistical Models	3	
MATH 426	Experimental Design	3	

<b>Statistics Electives:</b>		<b>6 credits</b>	
		Credits	Grade
		3	
		3	

**Select any two from the following, at least one of which must be MATH:**

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 323	Statistical Mechanics	3	
PSYC 450	Advanced Statistics in Psychology	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.