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

Page 1 of 2

### **MINOR in MATHEMATICS: 24 CREDITS**

#### LOWER DIVISION

		Credits_	Grade
MATH 157	Calculus & Analytical Geometry I	4	
<b>MATH 258</b>	Calculus & Analytical Geometry II	4	
<b>MATH 259</b>	Calculus & Analytical Geometry III	4	

#### UPPER DIVISION

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

\*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	
<b>MATH 258</b>	Calculus & Analytical Geometry II	4	
<b>MATH 259</b>	Calculus & Analytical Geometry III	4	
<b>MATH 260</b>	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.

#### UPPER DIVISION

One of the following two courses:	<i>3 credits</i> Credits <u>Grade</u>	
MATH 335 Applied Linear Algebra	3	
MATH 339 Linear Algebra	3	
One of the following three courses:	З с	redits
One of the following three courses: MATH 440 Foundations of Applied Math	<b>3 c</b> 3	redits
		redits

#### One 300-400 level Mathematics elective\*:

MATH 3	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.

# 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.

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

Page 2 of 2

## **MINOR in STATISTICS: 23 CREDITS**

LOWER DIVISION

UPPER DIVISION

Credits Grade	One of the following two courses: MATH 335 Applied Linear Algebra MATH 339 Linear Algebra	3 credits Credits Grade 3
	One of the following two courses:	3 credits
	MATH 422 Mathematical Statistics*	3 3
	MATH 421 IS a pre-requisite for MATH 422	
	One of the following two courses: MATH 425 Applied Statistical Models	3 credits
	MATH 426 Experimental Design	3
	Statistics Electives: Select any two from the following, at least one must be MATH:	of which 6 credits
	MATH 421 Probability Theory	3
	MATH 422 Mathematical Statistics	3
	MATH 423 Stochastic Processes	3
		3
		3
		3
		3
		3
		3
	PHYS 450 Statistical Physics	3
	or any course with significant probability or statistics with <b>prior</b> approval of the MATH department chair	content
	4	Credits Grade   4 MATH 335 Applied Linear Algebra   A MATH 339 Linear Algebra   One of the following two courses: MATH 321 Statistics for Experimentalists   MATH 421 Statistics for Experimentalists MATH 422 Mathematical Statistics*   *MATH 421 is a pre-requisite for MATH 422   One of the following two courses:   MATH 425 Applied Statistical Models   MATH 426 Experimental Design   Statistics Electives:   Select any two from the following, at least one   must be MATH:   MATH 421 Probability Theory   MATH 422 Stochastic Processes   MATH 423 Stochastic Processes   MATH 426 Experimental Design   ECON 355 Regression Analysis   ECON 451 Econometrics   ECON 452 Time Series Analysis   CPSC 322 Data Science Algorithms   CPSC 323 Machine Learning & Intelligent Systems   CPSC 324 Big Data Analytics   PHYS 450 Statistical Physics

**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.