## MATHEMATICS: MATHEMATICS & STATISTICS OPTION

### **Bachelor of Science (BS)**

This is a guide based on the 2023-2024 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

### **CURRICULUM CHECKLIST**

#### 54 Hour Major - No Minor Required MA140 Analytic Geometry & Calculus I (5) MA145 Analytic Geometry & Calculus II (4) MA160 Introduction to Mathematical Ideas (3) MA223 Elementary Probability and Statistics (3) MA244 Analytic Geometry & Calculus III (4) MA250 Foundations of Mathematics (3) MA323 Statistical Methods (3) MA334 Mathematical Programming (3) MA340 Concepts of Geometry (3) MA345 Linear Algebra (3) MA350 Differential Equations I (3) MA443 Elementary Number Theory (3) MA445 Modern Algebra (3) MA449 Mathematical Problem Solving (3) MA523 Probability & Statistics I (3) Choose 6 hours from one of the areas below: Mathematics area: MA338 Combinatorics & Graph Theory (3) MA464 Mathematical Cryptography (3) MA544 Numerical Methods (3) MA550 Differential Equations II (3) Statistics area: MA425 Applied Regression Analysis (3) MA475 Multivariate Methods (3) MA524 Probability & Statistics II (3) MA530 Statistical Learning (3) MA575 Time Series & Forecasting (3)

# **General Education Requirements** – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences 6 hours
- Constitution Requirement 3 hours
- Written Communication 6 hours
- Oral Communication 3 hours
- Natural Sciences 7 hours (from two disciplines, one to include a lab)
- Mathematics 3 hours
- Humanities & Fine Arts 9 hours (from at least two disciplines)
- Additional requirements 5 hours (to include UI100 for native students)
- Civics examination

#### **SAMPLE FOUR-YEAR PLAN**

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	1	MA145	4
	EN100	3	MA223	3
	MA140	5	General Education	3
	MA160	3	General Education	3
	General Education	3	General Education	3
	Total	15	Total	16
SECOND YEAR	MA244	4	MA345	3
	MA250	3	MA350	3
	MA323	3	General Education	3
	General Education	3	General Education	3
	General Education	3	Elective	3
			l	
•,	Total	16	Total	15
	MA445	3	MA334	15 3
			1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	MA445	3	MA334	3
	MA445 MA449	3	MA334 MA340	3
	MA445 MA449 General Education	3 3 3	MA334 MA340 General Education	3 3 3
THIRD YEAR	MA445 MA449 General Education General Education	3 3 3 3	MA334 MA340 General Education Elective	3 3 3 3
	MA445 MA449 General Education General Education Elective Total	3 3 3 3 3 15	MA334 MA340 General Education Elective Elective Total	3 3 3 3 3 15
THIRD YEAR	MA445 MA449 General Education General Education Elective Total	3 3 3 3 3 15	MA334 MA340 General Education Elective Elective Total	3 3 3 3 3 15
THIRD YEAR	MA445 MA449 General Education General Education Elective Total  MA523 Math or Stats elective	3 3 3 3 3 15	MA334 MA340 General Education Elective Elective Total  MA443 Math or Stats elective	3 3 3 3 15
THIRD YEAR	MA445 MA449 General Education General Education Elective Total  MA523 Math or Stats elective General Education	3 3 3 3 3 15	MA334 MA340 General Education Elective Elective Total  MA443 Math or Stats elective Elective	3 3 3 3 3 15
THIRD YEAR	MA445 MA449 General Education General Education Elective Total  MA523 Math or Stats elective General Education Elective	3 3 3 3 15	MA334 MA340 General Education Elective Elective Total  MA443 Math or Stats elective	3 3 3 3 3 15
	MA445 MA449 General Education General Education Elective Total  MA523 Math or Stats elective General Education	3 3 3 3 3 15	MA334 MA340 General Education Elective Elective Total  MA443 Math or Stats elective Elective	3 3 3 3 3 15

**Degree requirements for all students:** a minimum of 120 credit hours, completion of the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

A minimum 2.0 GPA in the major and overall are required to graduate with a BS degree.



