# BACHELOR of ARTS (ODD-YEAR START) MATHEMATICS



# **Approved Sample Curriculum**

The aim of the mathematics curriculum is to prepare the student for graduate studies, teaching, and/or for application of the principles of mathematics in business and industry.

### **First Year**

Fall	CR	Spring	CR
FYE150 First-Year Exploration	1	MAT152 Calculus and Analytical Geometry II	4
MAT151 Calculus and Analytical Geometry I	4	CIS 255 Programming in PYTHON	3
PHY141 General Physics I*	4	PHY142 General Physics II*	4
PHY141L General Physics I Lab*	1	PHY142L General Physics II Lab (recommended)*	1
CIS 114 Intro to Programming	3	Social Science Core	3
Outer Core or Free Elective	3		

Subtotal 16 Subtotal 15

#### **Second Year**

Fall	CR	Spring	CR
MAT201 Calculus and Analytic Geometry III	4	MAT202 Differential Equations	4
MAT320 Linear Algebra	3	MAT 231 Foundations of Mathematics	3
ENG 150 Literature, Writing, and Research	3	History Core	3
Foreign Language	3	Theology Core	3
Outer Core or Free Elective	3	ENG 200+ Core	3

Subtotal 16 Subtotal 16

## **Third Year**

Fall	CR	Spring	CR
MAT340 Probability	3	MAT405 Special Topics in Mathematics	3
MATH ELECTIVE	3	MATH ELECTIVE	3
Communication Core	3	Theology Core	3
Philosophy Core #1	1	Outer Core or Free Elective	3
Fine Arts Core	3	Outer Core or Free Elective	3
Outer Core or Free Elective	3		

Subtotal 16 Subtotal 15

### **Fourth Year**

Fall	CR	Spring	CR
MAT306 Abstract Algebra	3	MAT411 Advanced Calculus	3
MAT 498 Mathematics Senior Research I	2	MAT499 Mathematics Senior Research II	1
Outer Core or Free Elective	3	Outer Core or Free Elective	3
Philosophy Core #2	3	Outer Core or Free Elective	3
Outer Core or Free Elective	3	Outer Core or Free Elective	3

Subtotal 14 Subtotal 13

**Total Credits: 121** 

\*Mathematics majors may also take General Chemistry (CHE 111 and CHE 113 with labs) instead of General Physics I and II

Last Updated: Fall 2023

# BACHELOR of ARTS (EVEN-YEAR START) MATHEMATICS



# **Approved Sample Curriculum**

The aim of the mathematics curriculum is to prepare the student for graduate studies, teaching, and/or for application of the principles of mathematics in business and industry.

### **First Year**

Fall	CR	Spring	CR
FYE150 First-Year Exploration	1	MAT152 Calculus and Analytical Geometry II	4
MAT151 Calculus and Analytical Geometry I	4	MAT231 Foundations of Mathematics	3
PHY141 General Physics I*	4	PHY142 General Physics II*	4
PHY141L General Physics I Lab*	1	PHY142L General Physics II Lab (recommended)*	1
ENG 150 Literature, Writing, and Research	3	Social Science Core	3
Outer Core or Free Elective	3		

Subtotal 16 Subtotal 15

#### **Second Year**

Fall	CR	Spring	CR
MAT201 Calculus and Analytic Geometry III	4	MAT202 Differential Equations	4
MAT320 Linear Algebra	3	CIS 255 Programming in PYTHON	3
CIS114 Intro to Programming	3	History Core	3
Foreign Language	3	Theology Core	3
Outer Core or Free Elective	3	ENG 200+ Core	3

Subtotal 16 Subtotal 16

## **Third Year**

Fall	CR	Spring	CR
MAT306 Abstract Algebra	3	MAT411 Advanced Calculus	3
MATH ELECTIVE	3	MATH ELECTIVE	3
Communication Core	3	Theology Core	3
Philosophy Core #1	1	Outer Core or Free Elective	3
Fine Arts Core	3	Outer Core or Free Elective	3
Outer Core or Free Elective	3		

Subtotal 16 Subtotal 15

### **Fourth Year**

Fall	CR	Spring	CR
MAT340 Probability	3	MAT405 Special Topics in Mathematics	3
MAT 498 Mathematics Senior Research I	2	MAT499 Mathematics Senior Research II	1
Philosophy Core #2	3	Outer Core or Free Elective	3
Outer Core or Free Elective	3	Outer Core or Free Elective	3
Outer Core or Free Elective	3	Outer Core or Free Elective	3

Subtotal 14 Subtotal 13

**Total Credits: 121** 

Last Updated: Fall 2023