

## Calculus Sequence – 8 Credits

Majors must take one calculus sequence

- MA-143 Differential Calculus (4 cr)
- MA-144 Integral Calculus (4 cr)

Or

- MA-123 Elementary Calculus I
- MA-124 Elementary Calculus II
- MA-125 Intermediate Calculus (2 cr)

## Required Courses – 18 Credits

Each of the following courses must be taken

- MA-247 Introductory Linear Algebra
- MA-248 Math Tech Lab (1 cr)
- MA-250 Transitions to Advanced Mathematics
- MA-273 Multivariable Calculus I (4 cr)
- MA-274 Multivariable Calculus II (4 cr)
- MA-441 Modern Algebra

## Differential Equations Course – 3 or 4 Credits

Take one of the following courses

- MA-377 Ordinary Differential Equations
- MA-379 Differential Equations for Engineers (4 cr)

## Statistics Course – 3 Credits

Take one of the following courses

- MA-222 Intermediate Statistics
- MA-335 Probability Theory
- MA-336 Mathematical Statistics
- MA-337 Statistical Computing with R
- MA-338 Regression Analysis
- MA-389 Topics in Statistics

## Capstone Experience – 0 Credits

To be satisfied in an upper division MA course during the student's senior year.

## Mathematics Electives – 15 Credits

Take five of these courses. At least four of the electives must be at the MA-316 level or higher. One elective may be at the MA-212 level or higher, or a cognate course may be substituted with permission. A course cannot be counted as a statistics course and an elective course.

### **Choose up to 1 of the following – 3 Credits**

- MA-212 Elementary Statistics
- MA-214 Mathematics of Finance
- MA-216 Computer Mathematics
- MA-218 Quantitative Methods for Business
- MA-222 Intermediate Statistics
- MA-295 Credited Internship
- MA-302 Elementary Math Functions for Middle School
- MA-304 Statistics, Probability, and Discrete Math for Middle School
- MA-306 Geometry for Middle School
- A cognate course with permission

### **Choose at least 4 of the following – 12 Credits**

- MA-316 Intermediate Discrete Mathematics
- MA-335 Probability Theory
- MA-336 Mathematical Statistics
- MA-337 Statistical Computing with R
- MA-338 Regression Analysis
- MA-347 Topics in Linear Algebra
- MA-350 College Geometry
- MA-375 Advanced Calculus
- MA-382 Mathematical Modeling
- MA-385 Topics in Applied Mathematics
- MA-387 Topics in Mathematics
- MA-389 Topics in Statistics
- MA-399 Independent Study
- MA-400 History of Mathematics
- MA-417 Introduction to Topology
- MA-442 Topics in Modern Algebra
- MA-467 Functions of Complex Variables
- MA-481 Numerical Analysis

### Composition – 3 credits

*Additional Composition course(s) may be required based on placement testing*

- CM-102 English Composition II

### Core Requirement 1.1 – select one 3-4 credit course

*SLO 1.1: Problem solve and analyze quantitative information  
Based on placement testing*

- MA-123 Elementary Calculus I
- MA-124 Elementary Calculus II
- MA-143 Differential Calculus
- MA-144 Integral Calculus
- MA-273 Multivariable Calculus (4 cr)
- MA-274 Multivariable Calculus (4 cr)

### Core Requirement 2.1 – select one from each field

*SLO 2.1: Critically think about ideas and events that have shaped the humanistic tradition*

#### Literature – 3 credits

- EL-201 English Lit I       EL-205 Survey of World Lit
- EL-202 English Lit II       EL-206 Poetry
- EL-203 American Lit I       EL-207 Drama
- EL-204 American Lit II       EL-208 Fiction

#### History – Any 100 or 200 level course, 3 credits

#### Social Sciences – 3 credits

- EC-101 Principles of Macroeconomics (recommended)
- PO-100 Perspectives on Politics
- UR-151 The Contemporary City
- UR-125 Intro to Social Work

### Core Requirement 2.2 – select one from each field

*SLO 2.2 Distinguish behaviors and characteristics that support effective and appropriate interaction in a variety of cultural contexts*

#### Arts/Languages – 3 credits

- AR-110 Art in the City
- AR-127 Intro to Visual Arts
- AR-128 Intro to Music
- Modern, Classical or Cultural Language

#### Additional Humanities – 3 credits

- AR-110 Art in the City
- AR-127 Intro to Visual Arts       EL-205 Survey of World Lit
- AR-128 Intro to Music       EL-206 Poetry
- EL-201 English Lit I       EL-207 Drama
- EL-202 English Lit II       EL-208 Fiction
- EL-203 American Lit I       HS-100/200-level
- EL-204 American Lit II       Modern, Classical or Cultural Language

#### Social Sciences – 3 credits

- SO-121 Intro to Sociology
- AS/AT/LS/SJ/SO-101 Intro to Latin Am. and Latino Studies
- AT/GS/SJ/SO-136 Intro to LGBTQ Studies
- AT/GS/LS/SJ/SO-140 Intro to Women's Studies
- AS/LS/SJ/SO-177 Intro to Africana Studies
- SO-206 Exploring American Identities (CELAC students only)

### Core Requirement 2.3 – select one from each field

*SLO 2.3: Discern ethical and moral principles in order to more fully understand one's role as an individual in a larger community*

#### Philosophy – 3 credits

- PL-130 Intro to Philosophy
- PL-140 Intro to Ethics

#### Theology – 3 credits

- TH-110 Religious Faith in the Modern World
- TH-120 Intro to the Study of Christianity

#### Any 200 or 300-level Philosophy or Theology – 3 credits

### Core Requirement 3.1 – select one from each field

*SLO 3.1 Apply fundamental scientific principles and methods of inquiry to understand the impacts of the scientific research technology*

#### Natural Sciences – 3 credits

- PC-185 & 187 General Physics I & Lab (recommended)
- Biology, Chemistry, or Physics

#### STEM – 3 credits

- CS-180 Introduction to Programming (required)

### Core Requirement 4.1 – select one from each field

*SLO 4.1 Recognize the role of service, leadership and Ignatian ideals in the realization of a just, civil society*

#### Ignatian Seminar (FY-100 level) – 3 credits

*Must be completed within first 30 credits, with the exception of transfer students*

#### Interdisciplinary – 3 credits

*Courses offered will vary by term and year; please check Student Planning*

### Distributive Requirements

*In some cases, these may be satisfied as part of the major requirements. Some courses may satisfy more than one of these requirements.*

- Pluralism \_\_\_\_\_
- Values \_\_\_\_\_ *Pre-requisite courses, one PL and one TH course*
- Writing Intensive \_\_\_\_\_ *Must have greater than 30 credits*
- Oral Communication \_\_\_\_\_

### Credit Requirement for Graduation – 120 credits

*At least 30-31 additional credits are need to reach 120 credits (minimum for graduation). Students are encouraged to fulfill these credits with a minor.*

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