

Name: \_\_\_\_\_

## **MATHEMATICS (Actuarial Science Track), B.S.**

40 courses of three or more credits and 3 one-credit PE courses

### **GENERAL EDUCATION CORE**

**BASIC REQUIREMENTS** (2 courses and 3 one-credit PE courses)

- Composition and Rhetoric  
 EN 103 Composition and Rhetoric I  
 EN 104 Composition and Rhetoric II
- Physical Education Courses  
 PE 100  
 PE \_\_\_\_\_  
 PE \_\_\_\_\_

**MODES OF THINKING** (4 courses)

- Literature (Select one)  
 EN 110, EN 112, EN 115
- Mathematics (**Satisfied by Major – MA 121**)
- Natural Science (Select one)  
 BI 209, BI 210, BI 211, BI 242, CH 209, PH 209
- Philosophy  
 PL 109
- Social Sciences (Select one)  
 CJ 109, EC 209, EC 112, PO 103, PO 109, PS 109, or SO 109

**CULTURAL LITERACY** (6 courses)

- Humanities I and II. *Preferably* select a set (e.g., HI 201/202). However, a combination (e.g., PO 201 + HI 214) is acceptable.  
 Hum. I: HI 201, PO 201, HI 213  
 Hum. II: HI 202, PO 202, HI 214, HI 262
- Humanities III: Great Works of Art & Music (See Master Schedule of Day Classes)  
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- Humanities IV: Great Works of Literature (See Master Schedule of Day Classes)  
 \_\_\_\_\_
- Foreign Language/World Cultures (Select either two of the same language, any two WC, or one WC and one approved course with international study)  
 \_\_\_\_\_  
 \_\_\_\_\_

**CHRISTIAN VALUES AND THEOLOGY**

- (3 courses)
- Catholic Theology  
 TH 109
- Intermediate Theology (200/300 level TH)  
 TH \_\_\_\_\_
- Values Seminar (See Master Schedule of Day Classes)  
 \_\_\_\_\_

### **MAJOR – Mathematics Actuarial Science Track**

**Core Courses (12):**

- MA 121: Calculus I  
 MA 122: Calculus II  
 MA 222: Statistical Analysis with R  
 MA 223: Calculus III  
 MA 224: Calculus IV  
 MA 231: Discrete Mathematics  
 MA 243: Differential Equations  
 MA 301: Probability Theory  
 MA 331: Linear Algebra  
 MA 453: Senior Coordinating Seminar  
 CS 115: Introduction to Python  
 MA 445: Advanced Calculus or  
MA 471: Abstract Algebra

**Track Specific Courses (4):**

- MA 311: Actuarial Mathematics - P  
 MA 312: Actuarial Mathematics - FM  
 EC 209\*: Macroeconomics or  
EC 210: Microeconomics  
 CS260: Database and Data Visualization

\*EC 209 satisfies SS MOT

**MINOR** \_\_\_\_\_  
(6 courses)

- \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**ELECTIVES**

(As needed to complete 40-course req.)

- \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Ann Koefer, Director of Academic Resource Center  
Effective fall, 2020

*For the most up-to-date record of progress toward completion of degree requirements, students should use the Academic Evaluation tool, which is listed under the Academic Planning heading in WebAdvisor.*

# DE SALES UNIVERSITY

## Typical Program: MATHEMATICS MAJOR (Actuarial Science Track) B. S.

### FALL SEMESTER

Calculus I (MA 121)  
Introduction to Python (CS115)  
Composition and Rhetoric I (EN 103)  
Philosophy MOT (PL 109)  
Foreign Language/World Cultures  
Lifetime Fitness and Wellness (PE 100)

### SPRING SEMESTER

Calculus II (MA 122)  
Statistical Analysis with R (MA222)  
Composition and Rhetoric II (EN 104)  
Social Science MOT (if EC 209 is not taken \*)  
    **or** Free Elective  
Foreign Language/World Cultures  
Physical Education (Activity)

#### FIRST YEAR

#### SECOND YEAR

Calculus III (MA 223)  
Probability Theory (MA 301)  
Catholic Theology (TH 109)  
Humanities 1  
Free Elective  
Physical Education (Activity)

Calculus IV (MA 224)  
Discrete Mathematics (MA231)  
Actuarial Mathematics – P (MA 311)  
Humanities 2  
Literature MOT

#### THIRD YEAR

Linear Algebra (MA 331)  
Advanced Calculus (MA 445)  
    **or** Abstract Algebra (MA 471)  
Humanities 3  
Intermediate Theology  
Principles of Macroeconomics (EC 209)  
    **or** Principles of Microeconomics (EC 210) \*

Actuarial Mathematics - FM (MA 312)  
Differential Equations (MA 243)  
Databases and Data Visualization (CS 260)  
Humanities 4  
Natural Science MOT

#### FOURTH YEAR

Senior Coordinating Seminar (MA 453)  
Free Elective  
Free Elective  
Free Elective  
Free Elective

Values Seminar  
Free Elective  
Free Elective  
Free Elective  
Free Elective

\* EC 209 satisfies the SS MOT requirement

*Students pursuing Secondary Education Teacher Certification should follow the STEP Mathematics Graduation Requirement Forms.*