

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

BASED ON CREDITS

## MATHEMATICS, B.S.

### 4 + 1 Teacher Certification M.E.D. PROGRAM

Minimum of 121 credits and Three 1-credit PE courses for B.S. in Mathematics (Teacher Certification Track)  
22 Credits for M.ED. beyond Mathematics B.S. Teacher Certification Track

#### GENERAL EDUCATION CORE

##### BASIC REQUIREMENTS

###### **(6 credits and three 1-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 (9 credits)**

Literature (Select one)

- EN 110, EN 112, EN 115

Mathematics (**Satisfied by Major**)

Natural Science

- BI 209, BI 210, BI 211, BI 242, CH 209, PH 209

Philosophy

- PL 109

Social Sciences

- ED 209 (**Required by STEP**)

##### **CULTURAL LITERACY (18 credits)**

Humanities I and II. *Preferably* select a set (e.g., HI 201/202). However, a combination (e.g., PO 201 + HI 214) is acceptable. **HI 201-202 recommended.**

- 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

- \_\_\_\_\_

Humanities IV: Great Works of Literature

- \_\_\_\_\_

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**

###### **(9 credits)**

Catholic Theology

- TH 109

Intermediate Theology (200/300 level TH)

- TH \_\_\_\_\_

Values Seminar

- \_\_\_\_\_

#### MAJOR (49 credits)

- 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 445: Advanced Calculus
- OR** MA 471: Abstract Algebra
- MA 453: Senior Coordinating Seminar
- CS 115: Introduction to Python

#### STEP SPECIFIC COURSES :

- MA 351: Fundamentals of Modern Geometry
- MA 445: Advanced Calculus **OR** MA 471: Abstract Algebra (whichever was not taken as part of the core above)
- Elective: any one MA course at 300 level or above
- MA 387: Cryptology

#### REQUIRED EDUCATION COURSES (15 credits)

- ED 109: The Educative Process
- ED 209: Cognition and learning
- ED 218: Introduction to Exceptionality
- ED 366: Literacy Interventions 4-12
- ED 373: Teaching English Learners

#### FREE ELECTIVES (15 credits)

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

#### Admission Requirements into Graduate M.ED. Phase:

- Satisfactory completion of ED 109, ED 209, ED 218, ED 366, and ED 373
- Cumulative GPA of 3.0
- Passing score on PRAXIS Mathematics test

**DE SALES UNIVERSITY**  
**Example Plan: Mathematics (Teacher Certification), B.S.**

**First Year**

**Fall Semester (16 credits and 1-credit PE)**

Communication & Thought I (EN 103)  
Philosophical Thinking MOT (PL 109)  
Foreign Language/World Cultures  
Introduction to Python (CS 115)  
Calculus I (MA 121)  
Lifetime Fitness and Wellness (PE 100) 1

**Spring Semester (15 credits and 1-credit PE)**

Communication & Thought II (EN 104)  
Catholic Theology (TH 109)  
Foreign Language/World Cultures  
Calculus II (MA 122)  
The Educative Process (ED 109)  
Physical Education Activity

**Second Year**

**Fall Semester (15 credits and 1-credit PE)**

Calculus III (MA 223)  
Linear Algebra (MA 331)  
Humanities I - HI 201 recommended  
Literature MOT  
Cognition and Learning (ED 209)  
Physical Education Activity

**Spring Semester (15 credits)**

Calculus IV (MA 224)  
Discrete Math (MA 231)  
Humanities II - HI 202 recommended  
Introduction to Exceptionality (ED 218)  
Natural Science MOT

**Third Year**

**Fall Semester (15 credits)**

Probability & Statistics I (MA 301)  
Fundamentals of Modern Geometry (MA 351)  
Humanities III  
Intermediate Theology  
Literacy Interventions, Gr. 4-12 (ED 366)

**Spring Semester (15 credits)**

Differential Equations (MA 243)  
Statistical Analysis with R (MA 222)  
Humanities IV  
Values Seminar (ED 475 recommended)  
Cryptology (MA 387)

**Fourth Year \***

**Fall Semester (15 credits)**

Senior Coordinating Seminar (MA 453)  
Abstract Algebra (MA 471)  
Teaching English Learners (ED 373)  
Free Elective  
Free Elective

**Spring Semester (15 credits)**

Introduction to Analysis (MA 445)  
Mathematics Elective  
Free Elective  
Free Elective  
Free Elective

**\* Apply to the M.Ed. program**

Dr. Katrin Blamey, Chair of Education  
Koefer, Director of the Academic Success Center  
Effective Fall, 2022

**DSU UNIVERSITY**  
**Mathematics (Teacher Certification), GRADUATE M.ED. PHASE \*\***

**GRADUATE PHASE OF PROGRAM – Additional Tuition Based on Current Rates**

**Summer Semester**

SC518 Middle and Secondary Learner and Curriculum (3 credits)

SC519 Secondary Education Principles and Pedagogy (3 credits)

SC524 Secondary Education in Subject Area (3 credits)

SC522 Secondary Education Clinical Field Experience 1 (1 credit)

\* Intern Teaching Certificate issued and students apply for Full-Time Teaching Position

**Fall Semester**

SC525 Secondary Education Clinical Field 2 (while employed) - (3 credits)

SE522 Remedial Techniques in Reading and Writing - (3 credits)

**Spring Semester**

EE551 Student Teaching (while employed) - (3 credits)

\* Instructional I certification issued

**Summer Semester**

ED600 Research Capstone - (3 credits)

\* M.Ed. complete