



Department of Education
INTEGRATED MATHEMATICS
AYA MAJOR/MATHEMATICS MINOR
 Program Outline
 For Students Under the 2023-2024 BW Catalog

Name _____ ID# _____ Advisor _____

Degree Earned: Bachelor of Science in Education (BSEd)
 License Earned: Mathematics, 110094
 OAE Exams: 003 Assessment of Professional Knowledge: Adolescence to Young Adult (7-12); 027 Mathematics
 GPA Requirements for Graduation: 2.800 Cumulative, 2.800 in EDU Courses, 2.500 MTH Minor Courses

Courses marked with # fulfill the MTH minor requirements.
 MTH Minor requires 17 total credits which must include MTH 141, MTH 142, and a course above 200 level.

| Course # | Course Title | Hours | Advising Notes: Unless otherwise noted, course is offered in Fall and Spring) |
|--------------------------------------|--|-------|---|
| MTH 118 | Algebraic Thinking Through Modeling <i>Prerequisite: MTH 111, MTH 112 (Grade of C- or higher in both)</i> | 3 | Offered Fall Only |
| MTH 141# | Calculus I <i>Prerequisite: MTH 140 or an ACT Math Score of 27 or higher, an SAT Math Section Score of 550 or higher (if taken prior to March 2016), a SAT Math Section Score of 640 (if taken after March 2016), or a SAT Math Test Score of 28.5 or higher, or Instructor permission.</i> | 4 | |
| MTH 142# | Calculus II <i>Prerequisite: MTH 141</i> | 4 | |
| MTH 202# | Number Theory & Abstract Algebra for Teachers <i>Prerequisite/Corequisite: MTH 141</i> | 3 | Offered Every Third Fall beginning Fall, 2021 |
| MTH 203# | Calculus Concepts for Teachers <i>Prerequisite/Corequisite: MTH 141</i> | 3 | Offered Every Third Fall, Beginning Fall, 2020 |
| MTH 206# | Mathematical Logic and Proof Methods <i>Prerequisite: MTH 141</i> | 3 | Offered Fall Only |
| MTH 211# | Linear Algebra <i>Prerequisite: MTH 141</i> | 3 | Offered Spring Only |
| MTH 243# | Calculus III <i>Prerequisite: MTH 142</i> | 4 | |
| MTH 315# | College Geometry <i>Prerequisite/Corequisite: MTH 206</i> | 3 | Offered Fall Odd Years Only |
| MTH 405# | Theory of Probability <i>Prerequisite: MTH 243 or permission of instructor</i> | 4 | Offered Fall Even Years Only |
| Select one of the following Options: | | | |
| Option A = | | | |
| MTH 105 | Introduction to Probability & Statistics <i>Prerequisite: Knowledge of high school Algebra I & II and Geometry</i> | 3 | |
| Option B = | | | |
| MTH 235 AND | Probability & Statistics for Scientists & Engineers One of the following Computer Science electives: | 3 | |
| CSC 210 | Computer Science I: Programs and Applications | 3 | |
| CSC 211 | Introduction to Programming in Python | 3 | |
| CSC 212 | Intro to Programming for Scientists & Engineers | 3 | |