Illinois State University
Department of Mathematics
Secondary Mathematics Education Sequence

This sequence of the major is part of the entitlement program leading to high school teaching certification in Illinois. It also provides the background to allow students to pursue careers in business, industry, and government.

Mathematics Requirements (minimum 53 hours, grades of C or better in each course)
MAT 145 Calculus I (4 hours)
MAT 146 Calculus II (4 hours)
MAT 147 Calculus III (4 hours)
MAT 175 Elementary Linear Algebra (4 hours)
MAT 211 Euclidean and Non-Euclidean Geometry (4 hours)
MAT 223 Introduction to Secondary Mathematics Education (2 hours)
MAT 236 Elementary Abstract Algebra (4 hours)
MAT 260 Discrete Mathematics (4 hours)
MAT 320 History of Mathematics (3 hours)
MAT 323 Teaching Mathematics in the Secondary School (3 hours) Fall Only
MAT 324 Seminars for Student Teachers of Mathematics (3 hours) Spring Only
MAT 350.01 Applied Probability Models (4 hours)
MAT 351.01 Statistics and Data Analysis (4 hours)

Capstone Experience (3 hours)—MAT 268 Introduction to Undergraduate Research in Mathematics or MAT 328 Mathematics for Secondary Teachers—A Capstone Experience

Elective (3-4 hours) —Chosen from 200- or 300-level mathematics courses that are offered for major/minor credit other than MAT 326 and courses designed for the actuarial sequence.

Technology Requirement (3-4 hours)—one of IT 165 or IT 168 or MAT 326 (does not count toward the 53 hours)

Senior Portfolio (Completed in MAT 323 and MAT 324)

Professional Education Requirements (24 hours, grades of C or better in each course)
PSY 215 Educational Psychology (3 hours)
TCH 212 Issues in Secondary Education (2 hours)
TCH 216 Instructional and Evaluative Methods in Secondary Education (3 hours)
TCH 219 Reading in the Content Areas of Secondary Education (3 hours)
EAF 228 Social Foundations, 231 Introduction to Philosophy of Education or 235 Historical Foundations (3 hours)
Student Teaching (10 hours) Spring Only

Required Tests
1. State of Illinois Test of Academic Proficiency (TAP); former Basic Skills Test (www.icts.nesinc.com); or ACT Plus Writing with a composite score of at least 22
2. State of Illinois Mathematics Content Test (www.icts.nesinc.com)
3. State of Illinois Assessment of Professional Teaching (APT) Test (www.icts.nesinc.com)
4. Teacher Performance Assessment (edTPA) (completed during student teaching)

Secondary Mathematics Education Sequence--Sample Four-Year Plan

Year 1	
Fall	**Spring**
ENG 101 or COM 110	COM 110 or ENG 101
MAT 145 Calc I	MAT 146 Calc II
Inner Core Science	Inner Core Science
LAN 112***	PSY 110 Fund of Psychology
University Wide Elective	MAT 223Intro Secondary Math Ed
Year 2	
Fall	**Spring**
MAT 147 Calc III	MAT 320 History of Mathematics
MAT 175 Elem Linear Algebra	MAT 260 Discrete Mathematics
Middle Core Language in Humanities	PSY 215 Education Psychology
Middle Core Individuals & Civic Life	TCH 212 Issues Secondary Education
	Middle Core US Traditions
Year 3	
Fall	**Spring**
MAT 211 Euclid & Non-Euclid Geometry	MAT 236 Abstract Algebra
MAT 350.01 Appl Probability Models	MAT 351.01 or MAT Elective
TCH 216 Instruct & Eval Meth Sec Ed	TCH 219 Literacy Cont Areas Secondary Ed
Outer Core Fine Arts	Outer Core Social Science
	MAT 268* or IT 165 ** or IT 168**
Year 4	
Fall	**Spring**
MAT 323 Teach Math Secondary School	MAT 324 Seminar Student Teaching
EAF 228 or 231 or 235	STT 399.27 Student Teaching
MAT 328* or MAT 326** or IT 168**	
MAT Elective or MAT 351.01	
Outer Core Humanities	

*One of MAT 268 or MAT 328 must be completed.
**One of IT 165, IT 168 or MAT 326 must be completed.
***Students must satisfy a foreign language requirement that may be met by: 3 years of a single foreign language in high school or completion of the second semester or higher of college-level foreign language (LAN 112 or articulated course) with a grade of "C" or better or equivalent proficiency as determined by examination. American Sign Language may be used to fulfill this requirement by transfer credit or by proficiency.

Overall Graduation Requirements

Complete a minimum of 120 hours; complete General Education requirements; complete at least 42 senior level hours, complete residency requirements; complete a global studies course; complete the foreign language requirement; maintain a GPA of 2.8 overall and in the major; submission of senior portfolio. In addition, all Performance-Based Assessments for the Education Unit must be complete. In order to eligible for a certificate, all three required State of Illinois exams must be passed. **For complete, official information, consult your catalog.**

Contact Dr. George Seelinger, Department chair, for more information.
Mathematics Department

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