

**Secondary Education: Grades 9-12
Mathematics**

- Minimum grade point average of 3.0 on a 4.0 scale is required in all professional education courses.
- Minimum grade point average of 3.0 on a 4.0 scale is required in content area.
- A course grade less than a “C” is not allowed. A grade of “C-“ or lower does not satisfy the requirement.
- Minimum cumulative grade point average of 2.75 on a 4.0 scale required for certification.
- Students must complete all the blocks in the program sequence. Blocks should be taken in total.

School of Education Core Curriculum

Moral & Ethical Development

- THEO 1000 Theological Foundations
- PHIL 1050 Introduction to Philosophy
- EDF 3840 Professional Ethics

Required Assessment

- Ethics Case Study

Leadership & Service

- ANY HIST course
- ANY POLS, SOC, PSY, or ECON course
- EDL 3892 Leadership & Service Seminar

Required Assessment

- Leadership & Service Reflection

Inquiry

- Any MATH course
- Any Science course with Lab
- EDR 3891 Qualitative & Quantitative Methods
- EDR 4970 Action Research for Educators

Multicultural Studies

- EDF 3890 School & Community

Select two courses from the following:

- EDF 3620 Cultural Diversity in the Classroom
- EDSP 4310 Education of the Exceptional Individual
- EDSP 4480 Methods of Inclusive Classrooms

Communication & Technology

- CMM 1200 Introduction to Public Speaking
- ENGL 1900 Advanced Strategies of Rhetoric & Research
- Any Fine Arts
- Any Literature Course
- EDI 3893 Technological Application for Professionals

Secondary Education Curriculum

Block 1. Foundations of Teaching & Learning (6)

- EDF 2040 Foundations of Secondary Schools
- EDI 2940 Portfolio I
- EDF 2240 Growth, Development & Learning

Required Assessments

- Missouri Educator Profile
- Missouri General Education Assessment

Block 2. Reaching Diverse Learners (9)

- EDF 3620 Cultural Diversity in the Classroom
- EDSP 4310 Education of the Exceptional Child
- EDI 3001 English Language Learners

Block 3. Teaching Methods & Strategies (9)

- EDI 4210 Methods of Technology Integration
- EDI 3320 Methods in Teaching Secondary Mathematics*
- EDI 3325 Practicum in Teaching Secondary Mathematics

Block 4. Literacy & Assessment Practices (6)

- EDI 4420 Assessing Classroom Performance
- EDI 3200 Reading & Writing in the Content Fields

Block 5. The Classroom Environment (9)

- EDSP 4480 Teaching Methods for Inclusive Classrooms
- EDSP 4250 Classroom Management & Organization
- EDI 4200 Disciplinary Literacy Assessment & Intervention
- EDI 3940 Portfolio Development II

Required Assessment

- Missouri Content Assessment, Mathematics 9-12

Block 6. Becoming a Practitioner (15)

- EDI 4840 Student Teaching
- EDR 4970 Action Research for Educators
- EDI 4870 Professional Development Seminar
- EDI 4940 Portfolio Development III

Required Assessment

- Missouri Pre-Service Teacher Assessment
- Ethics Case Study

Areas Required for Certification	Courses Required at Saint Louis University
Calculus & Analytic Geometry (8)	__ MATH 1510 Calculus I (4) __ Math 1520 Calculus II (pre-requisite MATH 1510) (4)
Algebraic Structures (3)	__ MATH 3120 Introduction to Linear Algebra (pre-requisite MATH 2530 and MATH 2660) (3)
Geometry (3)	<i>Choose one of the following (offered Spring, odd years):</i> __ MATH 4410 Foundations in Geometry (pre-requisite MATH 1510) (3) __ MATH 4470 Non-Euclidean Geometry (pre-requisite MATH 1510) (3)
Computer Science (3)	<i>Choose one of the following:</i> __ CSCI 1010 Introduction to Computer Science, Principles (3) __ CSCI 1020 Intro to Computer Science, Bioinformatics (3) __ CSCI 1030 Intro to Computer Science, Game Design (3) __ CSCI 1040 Intro to Computer Science, Mobile Computing (3) __ CSCI 1050 Intro to Computer Science, Multimedia (3) __ CSCI 1060 Intro to Computer Science, Scientific Programming (3) __ CSCI 1070 Intro to Computer Science, Taming the Big Data (3) __ CSCI 1080 Intro to Computer Science, Web Development (3) __ CSCI 1300 Introduction to Object Oriented Programming (3)
Electives (3)	<i>Choose one of the following:</i> __ MATH 4110 Introduction to Abstract Algebra (3) __ MATH 4210 Real Analysis (pre-requisite MATH 2530) (3)
History of Math (3)	__ MATH 4050 History of Mathematics (pre-requisite MATH 1520; MATH 2660 recommended; offered Spring, even years) (3)
Completion of the Calculus System (4)	__ MATH 2530 Calculus III (pre-requisite MATH 1520) (4)
Structure of the Real Number System (3)	__ MATH 2660 Principles of Mathematics (pre-requisite MATH 1510) (3)
Probability & Statistics (3)	<i>Choose one of the following:</i> __ MATH 3850 Foundations of Statistical Analysis (pre-requisite MATH 2530; offered Fall only) (3)
To complete the major in Mathematics requires...(3)	<i>Choose one of the following:</i> __ MATH 3550 Differential Equations (3) __ MATH 4850 Introduction to Mathematical Statistics (pre-requisite MATH 4810; Spring only) (3) __ MATH 4150 Number Theory (pre-requisite MATH 4110) (3) __ MATH 4800 Elementary Theory of Probability (3) __ MATH 4870 Applied Regression (3) *An appropriate upper-division mathematics elective may be substituted, with the approval of the student's mathematics mentor.