



## Post Baccalaureate Teacher Certification Mathematics (9-12)

### Career Preparation

Missouri State University's Education Program, the largest and only one of its kind in Missouri, provides experiences that prepare students to become effective teachers. A comprehensive field-based component is part of this exciting program. Teachers who have completed a Missouri State University (MSU) Education program are generally considered to be highly qualified, successful classroom teachers. High-need areas currently include: Special Education, Math, Science, and Foreign Language. Post-Baccalaureate students who have had significant experience either in the classroom or with children are often considered more qualified and are frequently hired before those without the experience.

### Academic Program

The Post-Baccalaureate (Post-Bac) Education programs require satisfactory completion of competencies outlined by the Department of Elementary and Secondary Education (DESE). MSU offers several alternative routes to teacher certification which include: Post-Baccalaureate, Masters, and Provisional certification. All programs rely on coursework completed within an initial Bachelor's degree. Professional Education courses are sequenced to provide both study in the university setting and practical experience in classrooms.

### Courses

Students pursuing Post-Bac Teacher Certification at Missouri State need to submit original official transcripts from all universities, colleges, and institutions previously attended. Prior coursework will be evaluated and credit will be granted and applied for all equivalent certification requirements.

An Individualized Program of Study (IPS) will be provided to the student. The IPS is reviewed during an advising session. If a course was not initially determined to be equivalent, but may have provided the competencies required for certification, the student may submit a course description/syllabus for re-evaluation.

### Faculty and Staff Support

The Teacher Certification and several faculty offices are located in Hill Hall. Faculty members are actively involved in teaching, research, and service activities at the local, state, and national levels. While faculty may informally advise students, the Teacher Certification Advisement staff will provide the support and official advisement for all Post-Bac students pursuing teacher certification.

### Facilities

Missouri State University is fortunate to have Greenwood Laboratory School located on campus. Greenwood, a K-12 facility, provides students in the College of Education with first-hand experience in observing and working with students. The technology labs, located in Hill Hall, have the most recent innovations in instructional technology and are available for use by Education students.

### Special Services

The University and the College of Education are committed to the success of each student. Career Services, in cooperation with the College of Education, takes an active role in assisting Education students by providing information about teaching opportunities. Students are encouraged to meet with Career Services for job search assistance.

### For More Information

Teacher Certification Office  
Missouri State University  
901 S. National Ave.  
Springfield, MO 65897  
Office: 417-836-8772 Fax: 417-836-5008  
email: [teachercertification@missouristate.edu](mailto:teachercertification@missouristate.edu)  
[www.missouristate.edu/certification](http://www.missouristate.edu/certification)

## Required Coursework: Mathematics (9-12)

### Special Requirements

Course #	Title	Credits
COM 115	Fundamentals of Public Speaking	3 hours
PSY 121	Introductory Psychology	3 hours
		<b>6 hours</b>

### Professional Education

Course #	Title	Credits
EDC 150	Introduction to Teaching	1 hour
SEC 302	Introductory Psychology	4 hours
PSY 360	Educational Psychology	3 hours
SFR 486 or PSY 486	Management and Assessment in Middle and Secondary Classrooms	3 hours
SPE 340 or SPE 715	Educational Alternatives for Exceptional Students Foundations in Special Education	2-3 hours
RDG 474 or RDG 710	Reading and Writing in the Content Fields Reading in the Content Fields	2-3 hours
EDC 350	School and Society	3 hours
MTH409	Teaching and Learning of Mathematics I	3 hours
MTH 410	Teaching and Learning of Mathematics II	3 hours
MTH 493	Supervised Teaching	5-6 hours
MTH 494	Supervised Teaching	5-6 hours
		<b>34-38 hours</b>

### Middle School (5-9) Option

MID421 or MID810	Philosophy and Organization of Middle School Curriculum The Middle School – The Jr. High School	2-3 hours
MID439 or MID725	Middle School Instructional Strategies Advanced Theory and Practice in the Teaching of Early Adolescents	3 hours
MID425	Middle School Curriculum	2 hours
RDG318	Foundations of Reading Instruction	3 hours
EEM305	Field Experiences in Education	2 hours
		<b>12-13 hours</b>

### Content Area

Course #	Title	Credits
<b><u>Calculus and Analytical Geometry</u></b>		
MTH 261	Analytic Geometry and Calculus I	5 hours
MTH 280	Analytic Geometry and Calculus II	5 hours
MTH 302	Multivariate Calculus	3 hours
<b><u>Algebraic Structures (Choose One)</u></b>		
MTH 315	Algebraic Structures	3 hours
MTH 532	Introduction to Abstract Algebra	
MTH 533	Linear Algebra I	
<b><u>Geometry (Choose One)</u></b>		
MTH 460	College Geometry	3 hours
MTH 567	Introduction to Non-Euclidean Geometry	
<b><u>Computer Science (Choose One)</u></b>		
CSC 121	Introduction to Basic Programming	3 -4 hours
CSC 125	Introduction to C++ Programming	
CSC 131	Introduction to Computer Science	
<b><u>10 hours minimum required from areas such as the following:</u></b>		
MTH 575	History of Mathematics	3 hours
MTH 503	Advanced Calculus I	3 hours
MTH 504	Advanced Calculus II	3 hours
MTH 532	Introduction to Abstract Algebra	3 hours
MTH 536	Theory of Numbers	3 hours
MTH 302	Multivariate Calculus	3 hours
MTH 540	Statistical Theory I	3 hours
MTH 541	Statistical Theory II	3 hours
MTH 421	Numerical Analysis I	3 hours
MTH 533	Linear Algebra I	3 hours
MTH 534	Linear Algebra II	3 hours
		<b>30-32 hours</b>