



**MATHEMATICS SPECIALIST, GRADES 1-6**

EDUCATOR PREPARATION PROGRAM NAME <b>UNIVERSITY OF MISSOURI – ST. LOUIS</b>	EDUCATOR PREPARATION PROGRAM CODE <b>116118</b>
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**INSTRUCTIONS**

Please complete Educator Preparation Program (EPP) Name & EPP Code above.

**Certification Requirements:**

- Course Number – List the course number(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Course Title – List the course title(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Semester Hours – List the number of semester hours for each specific section. It is possible to use decimals (to the nearest tenth) to indicate partial use of a course to meet a requirement. The total number of semester hours must meet or exceed the minimum required number of semester hours.

Email the completed cover sheet, curriculum matrix, and advising/program information to [DESE.MoSPETransition@dese.mo.gov](mailto:DESE.MoSPETransition@dese.mo.gov) on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or [DESE.MoSPETransition@dese.mo.gov](mailto:DESE.MoSPETransition@dese.mo.gov)

**General Requirements**

Valid Missouri Teaching Certification

Two-Years of Mathematics Teaching Experience

**A. Professional Requirements (Minimum of 24 semester hours)**

**1. Mathematical Content Knowledge**

	Course Number	Course Title	Semester Hours
a. Mathematics Knowledge-Concepts, structures, skills, and processes of school mathematics from an advanced perspective including number/operation; geometry/measurement; algebra; and probability and statistics	TCH ED 6271	Tchg Lrng Number & Oper Adv Pers	0.5
	TCH ED 6272	Tchg Lrng Rational Numb Adv Pers	0.5
	TCH ED 6274	Tchg Lrng Algebraic Reas Adv Pers	0.5
	TCH ED 6273	Tchng Lrng Geom & Meas Adv Pers	0.5
	TCH ED 6276	Tchng Data Analysis & Math Modeling	0.5
b. Specialized Mathematics Knowledge of Teaching-Mathematics that relates to helping student understand school mathematics, often referred to as Mathematics Knowledge for Teaching (MKT)	TCH ED 6271	Tchg Lrng Number & Oper Adv Pers	0.5
	TCH ED 6272	Tchg Lrng Rational Numb Adv Pers	0.5
	TCH ED 6274	Tchg Lrng Algebraic Reas Adv Pers	0.5
	TCH ED 6273	Tchng Lrng Geom & Meas Adv Pers	0.5
	TCH ED 6276	Tchng Data Analysis & Math Modeling	0.5

**2. Pedagogical Content Knowledge (PCK) for Mathematics**

	Course Number	Course Title	Semester Hours
a. Understanding how students and adults learn mathematics	TCH ED 6271	Tchg Lrng Number & Oper Adv Pers	0.5
	TCH ED 6272	Tchg Lrng Rational Numb Adv Pers	0.5
	TCH ED 6274	Tchg Lrng Algebraic Reas Adv Pers	0.5
	TCH ED 6273	Tchng Lrng Geom & Meas Adv Pers	0.5
	TCH ED 6276	Tchng Data Analysis & Math Modeling	0.5
b. Effective teaching strategies for supporting mathematics learning	TCH ED 6271	Tchg Lrng Number & Oper Adv Pers	0.7
	TCH ED 6272	Tchg Lrng Rational Numb Adv Pers	0.7
	TCH ED 6274	Tchg Lrng Algebraic Reas Adv Pers	0.7
	TCH ED 6273	Tchng Lrng Geom & Meas Adv Pers	0.7
	TCH ED 6276	Tchng Data Analysis & Math Modeling	0.7
c. Curriculum trajectories, materials, standards and methods for aligning curriculum systems	TCH ED 6271	Tchg Lrng Number & Oper Adv Pers	0.3
	TCH ED 6272	Tchg Lrng Rational Numb Adv Pers	0.3
	TCH ED 6274	Tchg Lrng Algebraic Reas Adv Pers	0.3
	TCH ED 6273	Tchng Lrng Geom & Meas Adv Pers	0.3
	TCH ED 6276	Tchng Data Analysis & Math Modeling	0.3
d. Evaluation of mathematical abilities and achievement including formal and informal diagnostic procedures and in prescriptive instruction	TCH ED 6271	Tchg Lrng Number & Oper Adv Pers	0.5
	TCH ED 6272	Tchg Lrng Rational Numb Adv Pers	0.5
	TCH ED 6274	Tchg Lrng Algebraic Reas Adv Pers	0.5
	TCH ED 6273	Tchng Lrng Geom & Meas Adv Pers	0.5
	TCH ED 6276	Tchng Data Analysis & Math Modeling	0.5

3. Foundations of Leadership			
	Course Number	Course Title	Semester Hours
a. Effective communication strategies within and outside school	TCH ED 6277	Foundations of Mathematical Leadership in Elem Schools	1.0
	TCH ED 6278	Mathematical Ldrshp Elem Schools Adv	0.5
b. Professional development expertise ability to plan, develop, implement and evaluate learning environments for teachers	TCH ED 6277	Foundations of Mathematical Leadership in Elem Schools	1.0
	TCH ED 6278	Mathematical Ldrshp Elem Schools Adv	0.5
c. Ability to establish and nurture professional communities of learners-students, parents, and educators	TCH ED 6278	Mathematical Ldrshp Elem Schools Adv	1.0
d. Informed about and contribute to policy and professional organization work related to teaching and learning mathematics	TCH ED 6278	Mathematical Ldrshp Elem Schools Adv	1.0
4. Culminating Clinical Experience (Three semester hours of experience working with a full range of students and educators in various professional development settings)			
	Course Number	Course Title	Semester Hours
	TCH ED 6281	Internship Numb & Oper Elem Schls	1.0
	TCH ED 6282	Internship Rational Numbs Elem Schls	1.0
	TCH ED 6284	Internship Algebraic Reas Elem Schls	1.0
	TCH ED 6283	Internship Geom & Meas Elem Schls	1.0
<b>Professional Requirements - Total Semester Hours</b>			<b>24.0</b>

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