



MATHEMATICS SPECIALIST, GRADES 1-6

EDUCATOR PREPARATION PROGRAM NAME SOUTHEAST MISSOURI STATE UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 120120
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INSTRUCTIONS

Please complete Educator Preparation Program (EPP) Name & EPP Code above. The EPP Code may be located at <https://dese.mo.gov/sites/default/files/EPP-Code-Name.pdf>

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 on or before the date established in the Transition Plan.

QUESTIONS: Contact Gale Hairston, 573/751-1668 or 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	MD 621	Number & Operations for EMS	0.5
	MD 622	Ratnl Num & Proportional Rel for EMS	0.5
	MD 627	Algebraic Reasoning for EMS	0.5
	MD 626	Geom & Measurement for EMS	0.5
	MD 624	Data and Probability for EMS	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)	MD 621	Number & Operations for EMS	0.5
	MD 622	Ratnl Num & Proportional Rel for EMS	0.5
	MD 627	Algebraic Reasoning for EMS	0.5
	MD 626	Geom & Measurement for EMS	0.5
	MD 624	Data and Probability for EMS	0.5

2. Pedagogical Content Knowledge (PCK) for Mathematics

	Course Number	Course Title	Semester Hours
a. Understanding how students and adults learn mathematics	MD 621	Number & Operations for EMS	0.5
	MD 622	Ratnl Num & Proportional Rel for EMS	0.5
	MD 627	Algebraic Reasoning for EMS	0.5
	MD 626	Geom & Measurement for EMS	0.5
	MD 624	Data and Probability for EMS	0.5
b. Effective teaching strategies for supporting mathematics learning	MD 621	Number & Operations for EMS	0.7
	MD 622	Ratnl Num & Proportional Rel for EMS	0.7
	MD 627	Algebraic Reasoning for EMS	0.7
	MD 626	Geom & Measurement for EMS	0.7
	MD 624	Data and Probability for EMS	0.7
c. Curriculum trajectories, materials, standards and methods for aligning curriculum systems	MD 621	Number & Operations for EMS	0.3
	MD 622	Ratnl Num & Proportional Rel for EMS	0.3
	MD 627	Algebraic Reasoning for EMS	0.3
	MD 626	Geom & Measurement for EMS	0.3
	MD 624	Data and Probability for EMS	0.3
d. Evaluation of mathematical abilities and achievement including formal and informal diagnostic procedures and in prescriptive instruction	MD 621	Number & Operations for EMS	0.5
	MD 622	Ratnl Num & Proportional Rel for EMS	0.5
	MD 627	Algebraic Reasoning for EMS	0.5
	MD 626	Geom & Measurement for EMS	0.5
	MD 624	Data and Probability for EMS	0.5

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3. Foundations of Leadership			
	Course Number	Course Title	Semester Hours
a. Effective communication strategies within and outside school	EL 667	Foundations of Mathematical Leadership for Elementary Mathematics Specialists	1.0
	EL 668	Mathematical Leadership for Elementary Mathematics Specialists: Influencing and Facilitating Improvement	0.5
b. Professional development expertise ability to plan, develop, implement and evaluate learning environments for teachers	EL 667	Foundations of Mathematical Leadership for Elementary Mathematics Specialists	1.0
	EL 668	Mathematical Leadership for Elementary Mathematics Specialists: Influencing and Facilitating Improvement	0.5
c. Ability to establish and nurture professional communities of learners-students, parents, and educators	EL 668	Mathematical Leadership for Elementary Mathematics Specialists: Influencing and Facilitating Improvement	1.0
d. Informed about and contribute to policy and professional organization work related to teaching and learning mathematics	EL 668	Mathematical Leadership for Elementary Mathematics Specialists: Influencing and Facilitating Improvement	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
	MD 611	Internship in Number & Op for EMS	1.0
	MD 612	Internship in Ratnl Num & Prop Rel for EMS	1.0
	MD 617	Internship in Algebraic Reas for EMS	1.0
	MD 616	Internship in Geom & Meas for EMS	1.0
Professional Requirements - Total Semester Hours			24.0