Name:	Mathematics B.S. (Pure Math Option)	
	STEM Education Minor, Mathematics (7-12) Teacher Licensure	
Expected Graduation Date:	Updated:	

The requirements for the mathematics B.S. degree are listed in black.

The STEM Education minor and math teacher licensure requirements are in red.

The placement of the courses below suggests one possibility; there are other options; also other options for math electives.

Fall	Spring
STEM 12001 Intro to Teaching STEM Subjects	STEM 12102 Inquiry Approach to Teaching STEM Subjects
(fulfills UNIV 1001 requirement)	
MATH 24004 Calculus I	MATH 25004 Calculus II
	MATH 28003 Transition to Advanced Mathematics
	MATH 28001 Transitions Lab

Fall	Spring
STEM 21003 Knowing & Learning in Math & Science (Fa)	STEM 32003 Classroom Interactions (Sp)
MATH 26004 Calculus III	MATH 25804 Differential Equations
MATH 30903 Abstract Linear Algebra	MATH 31103 Intro to Abstract Algebra
	CSCE 20004 Programming Foundations 1

Fall	Spring
MATH 29003 Functions, Foundations, and Models (Fa-Even)	MATH 41103 Intro to Abstract Algebra II; from choice of 4**
MATH 32003 Number Theory (<i>Fa-Even</i>); from choice of 4**	MATH 31303 History of Math (elective*) or
	STAT 30003 Statistical Methods (elective*)
MATH 37703 Foundations of Geometry (elective*) – (Fa)	MATH 49303 Math Major Seminar
MATH 45103 Advanced Calculus I	MATH 45203 Advanced Calculus II; from choice of 4**

Fall	Spring
(new internship course tba – part time Fall Internship, 2	STEM 45006 Teaching Internship
school days a week, Tues/Thurs.)	Full time internship for 16 weeks
STEM 43103 Teaching Secondary Mathematics 1	STEM 43103 Teaching Secondary Mathematics II
	Meets on evening a week on campus
MATH 44403 Complex Variables (Fa)	
**If 3 from choice of 4 have not yet been met, take	
MATH 45003 Differential Geometry (Fa-Odd)	

Add other university requirements and electives to reach required total of 120 credit hours for graduation

STEM 20003 The Art of STEM Communication is recommended for students who need a social science elective. It can also be taken instead of STEM 12001/12102, although the latter is recommended for future math teachers.

Specific to the Mathematics B.S. (versus B.A.): (courses in the advising guide above that are from the following two categories can be substituted based on the B.S. requirements described below)

*Choose 2 upper-level MATH or STAT electives (recommended for teaching: Geometry, History of Math, Statistics)

**Choose 3 courses for a total of 9 hours from the following list of 4 courses:

MATH 32003 Number Theory (Fall, even years)

MATH 41103 Intro to Abstract Algebra II (Spring)

MATH 45003 Differential Geometry (Fall, odd years)

MATH 45203 Advanced Calculus II (Spring)

See **Fulbright advisor for STEM Ed minor** Suzanne Wyatt for an official advising guide (<u>suzanneh@uark.edu</u>) Declare the STEM Education minor on the Fulbright Program Update form: <u>https://fulbright.uark.edu/advising-center/academic_services/program-update.php</u>

See **STEM Ed program advisor** (unofficial advising) to learn how the STEM Ed minor and the teaching internship courses can fit into the mathematics or computer science degree: Dr. Kim McComas, <u>kmccomas@uark.edu</u>

Non-licensure Options: Students who choose not to complete the teacher licensure program for secondary mathematics, science, or computer science can apply the STEM Ed courses to earn a 9-credit hour Certificate in STEM Education or the 15-credit hour Minor in STEM Education.

Advising Notes: