

## Academic Map: Mathematics, STEMteach Mathematics Education

Department: Mathematics Degree: BS  
 Program/Major: Mathematics  
 Track/Emphasis: STEMteach Mathematics Education  
 Does this program require a minor? (Yes/No) Yes

### Important program information in the online *Undergraduate Bulletin*:

UCA Core Requirements: <https://uca.edu/ubulletin/general-policies-information/uca-core/>  
 LD Core Check Sheet: <https://uca.edu/academicbulletins/ld-uca-core/>  
 Degree Requirements: <https://uca.edu/ubulletin/general-policies-information/degree-requirements/>  
 Program Description: <https://uca.edu/ubulletin/colleges-departments/cn/mathematics/>  
 Course Descriptions: <https://uca.edu/ubulletin/courses/>

This degree program requires a total of **120** semester credit hours, including at least **40** upper-division credit hours.

Comparable courses in the Arkansas Course Transfer System (ACTS) are cross-referenced in the ACTS column of each semester block below; a [core link](https://uca.edu/academicbulletins/ld-uca-core/) (<https://uca.edu/academicbulletins/ld-uca-core/>) takes the user to the *Undergraduate Bulletin's* Lower-Division (LD) UCA Core check sheet, where UCA Core options and ACTS course numbers are listed in full; an [acts link](https://uca.edu/academicbulletins/acts/) takes the user to the *Undergraduate Bulletin's* ACTS page (<https://uca.edu/academicbulletins/acts/>) for additional information and a UCA-ACTS crosswalk.

**Scholarship recipients:** Please be aware of eligibility criteria for your scholarship(s). In particular, pay attention to (1) the enrollment requirements each semester for disbursement of your scholarship(s) and (2) the number of hours and GPA required each semester and/or year for renewal of your scholarship(s). Some Academic Maps may suggest enrollment in fewer hours than required for disbursement of your scholarship(s). In such cases, work with your academic advisor to adjust your schedule to meet requirements most efficiently. Contact the Office of Student Financial Aid at (501) 450-3140 with any questions regarding enrollment/renewal requirements of your scholarship(s). For online information resources, see endnote <sup>1</sup>.

### Year 1

#### Fall – Semester 1 (credit hours: 14)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	1496	Calculus I	4	<a href="#">MATH2405</a>
WRTG	1310	Introduction to College Writing or Approved alternative (LD UCA Core: Writing Foundation) <sup>2</sup>	3	<a href="#">ENGL1013 core link</a>
		LD UCA Core <sup>2</sup>	3	<a href="#">core link</a>
		LD UCA Core <sup>2</sup>	3	<a href="#">core link</a>
STEM	1100	Inquiry Approaches to Teaching (UCA STEMteach) <sup>3</sup>	1	

#### Spring – Semester 2 (credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	1497	Calculus II	4	<a href="#">MATH2505</a>
WRTG ENGL	1320 1320	Academic Writing and Research or Interdisciplinary Writing and Research or Other approved alternative (LD UCA Core: Research/Writing) <sup>2</sup>	3	<a href="#">ENGL1023 ENGL1023 core link</a>
		LD UCA Core <sup>2</sup>	3	<a href="#">core link</a>
		LD UCA Core (Natural Sciences) <sup>2</sup>	4	<a href="#">core link</a>
STEM	1101	Inquiry Based Lesson Design (UCA STEMteach) <sup>3</sup>	1	

**Year 2****Fall – Semester 3 (credit hours: 17)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	2335	Transitions to Advanced Math	3	
		General Elective	3	
MATH	2471	Calculus III	4	MATH2603
		LD UCA Core	3	
MATH	2441	Mathematical Computation	4	

**Spring – Semester 4 (credit hours: 16)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	3320	Linear Algebra (UD UCA Core: I)	3	
		LD UCA Core <sup>2</sup>	3	<a href="#">core link</a>
STEM	1301	Knowing and Learning (UCA STEMteach) <sup>3</sup>	3	
		LD UCA Core (Natural Sciences) <sup>2</sup>	4	<a href="#">core link</a>
MATH	3354 2330	Concepts of Discrete Math or Discrete Structures I	3	

**Year 3****Fall – Semester 5 (credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
		LD UCA Core <sup>2</sup>	3	<a href="#">core link</a>
		LD UCA Core <sup>2</sup>	3	<a href="#">core link</a>
MATH	4313	Function and Modeling	3	
MATH	3360	Introduction to Rings and Fields	3	
MATH	3370	Mathematics in Secondary Schools	3	

**Spring – Semester 6 (credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	4372 3311	Introduction to Statistical Inference Statistical Methods II	3	
MATH	4345	College Geometry	3	
MATH	4301	Secondary Mathematics Methods (UD UCA Core: C)	3	
STEM	2301	Classrooms Interactions (UCA STEMteach) <sup>3</sup>	3	
		General Elective	3	

**Year 4****Fall – Semester 7 (Credit hours: 16)**

SUBJ	NUM	TITLE	SCH	ACTS
STEM	3310	Research Methods in Mathematics and Science (UCA STEMteach) <sup>3</sup>	3	
		General Elective	4	
MATH	4350	Introduction to the History of Mathematics (UD UCA Core: D)	3	
MATH	4371	Introduction to Probability	3	
STEM	3300	Project-Based Instruction (UCA STEMteach)	3	

**Spring – Semester 8 (Credit hours: 12)**

SUBJ	NUM	TITLE	SCH	ACTS
STEM	4600	Apprentice Teaching (UCA STEMteach) (UD UCA Core: Z)	6	
STEM	4605	Apprentice Teaching Seminar (UCA STEMteach)	6	

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 SIGNED – DEPARTMENT CHAIR

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 DATE

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 SIGNED – COLLEGE DEAN

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 DATE

**To be completed by the advisor when an Eight-Semester plan is accepted by the student:**

If applicable, has student selected a minor? Type “x” as appropriate. \_\_\_\_\_ No  Yes

If “yes,” specify: UCA STEMteach

### Notes

<sup>1</sup> See online information resources for UCA scholarships at <https://uca.edu/scholarships/> and for state scholarships at <https://scholarships.adhe.edu/scholarships-and-programs/a-z/>.

<sup>2</sup> See appropriate choices, alternatives, or substitutions under “UCA Core” in the *Undergraduate Bulletin*. Prior to completion of 30 semester hours, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living.

The student will also need to complete major, minor, or general elective courses designated as fulfilling the upper-division and capstone requirements of the UCA Core. See annotations in this Academic Map for courses in the major that will fulfill these requirements; for others, consult the *Undergraduate Bulletin* and your academic advisor.

<sup>3</sup> This Academic Map includes the 26 credit hours of the UCA STEMteach minor.