

Academic Map: Mathematics, UCA STEMteach Mathematics Education

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

Important program information in the online *Undergraduate Bulletin*:

UCA Core Requirements: <http://uca.edu/ubulletin2015/general-policies-information/uca-core/>
LD Core Check Sheet: <http://uca.edu/ubulletin/ldcore/>
Degree Requirements: <http://uca.edu/ubulletin2015/general-policies-information/degree-requirements/>
Program Description: <http://uca.edu/ubulletin2015/colleges-departments-programs/college-of-natural-sciences-and-mathematics/departments-of-mathematics/>
Course Descriptions: <http://uca.edu/ubulletin2015/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](http://uca.edu/ubulletin/ldcore/) (http://uca.edu/ubulletin/ldcore/) takes the user to the *Undergraduate Bulletin's* UCA Lower-Division Core check sheet, where UCA Core options and ACTS course numbers are listed in full; an [acts link](http://uca.edu/ubulletin/arkansas-course-transfer-system/) takes the user to the *Undergraduate Bulletin's* ACTS page (http://uca.edu/ubulletin/arkansas-course-transfer-system/) for additional information and a UCA-ACTS crosswalk.

Year 1

Fall – Semester 1 (credit hours: 14)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	1496	Calculus I	4	MATH2405
WRTG	1310	Introduction to College Writing or Approved alternative (LD UCA Core: Writing Foundation) ¹	3	ENGL1013 core link
		LD UCA Core ¹	3	core link
		LD UCA Core ¹	3	core link
EDUC	1100	Inquiry Approaches to Teaching (UCA STEMteach) ²	1	

Spring – Semester 2 (credit hours: 15)

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

Year 2**Fall – Semester 3 (credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	2335	Transition to Advanced Mathematics	3	
MATH	2471	Calculus III	4	MATH2603
EDUC	1301	Knowing and Learning (UCA STEMteach) ²	3	
		LD UCA Core (Natural Sciences) ¹	4	core link
		General Elective	1	

Spring – Semester 4 (credit hours: 16)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	2441	Mathematical Computation	4	
MATH	3320	Linear Algebra (UD UCA Core: I)	3	
MATH	3354 2330	Concepts of Discrete Math or Discrete Structures I	3	
		LD UCA Core ¹	3	core link
EDUC	2301	Classrooms Interactions (UCA STEMteach) ²	3	

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

SUBJ	NUM	TITLE	SCH	ACTS
MATH	4371	Introduction to Probability (UD UCA Core: R)	3	
		MATH Major Elective, upper-division	3	
		LD UCA Core ¹	3	core link
MATH	4313	Function and Modeling	3	
EDUC	3300	Project-Based Instruction (UCA STEMteach) ²	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	
		LD UCA Core ¹	3	core link
		LD UCA Core ¹	3	core link
MATH	3370	Mathematics in Secondary Schools	3	

Year 4**Fall – Semester 7 (Credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	4301	Secondary Mathematics Methods (UD UCA Core: C)	3	
MATH	3360	Introduction to Rings and Fields	3	
STEM	3310	Research Method and Math and Science (UCA STEMteach) ²	3	
		General Elective	3	

SUBJ	NUM	TITLE	SCH	ACTS
		General Elective	3	

Spring – Semester 8 (Credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
		General Elective	3	
STEM	3305	Perspectives on Mathematics and Science (UCA STEMteach) ²	3	
STEM	4305	Apprentice Teaching Seminar (UCA STEMteach) ²	3	
STEM	4600	Apprentice Teaching (UCA STEMteach) ²	6	

 SIGNED – DEPARTMENT CHAIR

 DATE

 SIGNED – COLLEGE DEAN

 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

¹ 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.

² This Academic Map includes the 26 credit hours of the UCA STEMteach minor.