

Academic Map: Environmental Science, Chemistry

Department: Chemistry and Biochemistry **Degree:** BS
Program/Major: Environmental Science
Track/Emphasis: Chemistry
Does this program require a minor? (Yes/No) No

Important program information in the online *Undergraduate Bulletin*:

UCA Core Requirements: <https://uca.edu/ubulletin/general-policies-information/uca-core/>
LD UCA Core Check Sheet: <https://uca.edu/academicbulletins/ld-uca-core/>
UD UCA Core Course List: <https://uca.edu/academicbulletins/ud-uca-core/>
Degree Requirements: <https://uca.edu/ubulletin/general-policies-information/degree-requirements/>
Program Description: <https://uca.edu/ubulletin/programs-by-program/interdisciplinary/environmental-science/>
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 1.

Year 1

Fall – Semester 1 (credit hours: 14)

SUBJ	NUM	TITLE	SCH	ACTS
CHEM	1450	College Chemistry I	4	CHEM1414
WRTG	1310	Introduction to College Writing	3	ENGL1013
		LD UCA Core Course ²	3	core link
MATH	1496	Calculus I	4	MATH2405

Spring – Semester 2 (credit hours: 17)

SUBJ	NUM	TITLE	SCH	ACTS
CHEM	1451	College Chemistry II	4	CHEM1424
WRTG ENGL	1320 1320	Academic Writing and Research or Interdisciplinary Writing and Research or Other approved alternative (LD UCA Core: Research/Writing) ²	3	ENGL1023 ENGL1023 core link
MATH	1497	Calculus II	4	MATH2505
		LD UCA Core Course ²	3	core link
		LD UCA Core Course ²	3	core link

Year 2**Fall – Semester 3 (credit hours: 14)**

SUBJ	NUM	TITLE	SCH	ACTS
CHEM	2401	Organic Chemistry I	4	
BIOL	1440	Biology I	4	BIOL1014
PSCI	1330	US Government and Politics	3	PLSC2003
		LD UCA Core Course ²	3	core link

Spring – Semester 4 (credit hours: 16)

SUBJ	NUM	TITLE	SCH	ACTS
CHEM	3411	Organic Chemistry II	4	
BIOL	1441	Biology II	4	
		LD UCA Core Course ²	3	core link
		LD UCA Core Course ²	3	core link
CHEM	3211	Organic Spectroscopy	2	

Year 3**Fall – Semester 5 (credit hours: 16)**

SUBJ	NUM	TITLE	SCH	ACTS
CHEM	3520	Quantitative Analysis	5	
PHYS	1441 1410	University Physics 1 or College Physics 1	4	PHYS2034 PHYS2014
GEOG	1400	Earth Systems Science	4	GEOG2223
		Restricted elective ³	3	

Spring – Semester 6 (credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
ENVR	3410	Environmental Theory and Application (UD UCA Core: D, C)	4	
PHYS	1442 1420	University Physics 2 or College Physics 2	4	PHYS2044 PHYS2024
CHEM	4451	Advanced Analytical Chemistry	4	
		UD UCA Core Course ² or General Elective	3	

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

SUBJ	NUM	TITLE	SCH	ACTS
ENVR	4410	Environmental Practicum (UD UCA Core: Z)	4	
GEOG	3301	Conservation of Natural Resources	3	
		Restricted elective ³	3	
		Restricted elective ³	3	
PSCI	3320	Environmental Policy and Regulation ⁴	3	

Spring – Semester 8 (Credit hours: 12)

SUBJ	NUM	TITLE	SCH	ACTS
CHEM	4351	Environmental Chemistry ⁵	3	
CHEM	4152	Environmental Chemistry Laboratory ⁵	1	
		Restricted elective ³	1	
		UD UCA Core Course ² (UD UCA Core: I)	3	
		UD UCA Core Course ² or General Elective (UD UCA Core: R)	3	
		General Elective	1	

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: _____

Notes

¹ 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/>.

² See appropriate choices, alternatives, or substitutions under “UCA Core” in the Undergraduate Bulletin. During the first year, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living. An approved UCA Core lab science and an approved UCA Core math course should be taken in the first two years if possible. Students are encouraged to choose a course in economics to fulfill either Lower Division Core social science category (ECON 2320 or 2321) or their responsible living category (ECON 1310) requirements.

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. Consult annotations in this Academic Map, the *Undergraduate Bulletin*, and your academic advisors for appropriate courses with which to fulfill UD UCA Core requirements.

³ Restricted elective (at least 10 hours): Choose from CHEM 3150, CHEM 3360, CHEM 4121, CHEM 4320, CHEM 4335, CHEM 4380, CHEM 4450, CHEM 4460, BIOL 3403, ENVR 4465, GEOG 4304, GEOG 4305, ECON 3330, and a maximum of 2 credits of research in the College of Natural Science and Mathematics, or 8 hours of courses that count toward a minor in mathematics, biology, physics, or geography.

⁴ This course carries the prerequisites of PSCI 1330 AND the consent of the PSCI 3320 instructor or the chair of the Political Science department.

⁵ CHEM 4351 and CHEM 4152 are offered spring semester, odd years. Must be taken in semester offered.