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Bachelor of Science in Environmental Science

About This Program

Bachelor of Science in Environmental Science emphasizes interdisciplinary training related to environmental sciences and is designed for students who plan to enter the profession or go to graduate school.

Competencies

- 1. Upon graduation, students will be able to identify, formulate, and solve problems in environmental sciences
- 2. Upon graduation, students will be able to identify, formulate, and solve problems in core sciences including mathematics/statistics, biology, chemistry, and physics
- 3. Upon graduation, students will be able to have competencies for field work that refers to the analytical and measurement skills, knowledge including uncertainties in observations, and attitudes to successfully participate in a practical, on-location learning experience

Curriculum

Foundations

<u>General Core Requirements (https://catalog.uta.edu/academicregulations/degreerequirements/generalcorerequirements/</u>) Students must complete specific courses in certain core areas.

For Communication select:		
ENGL 1301	RHETORIC AND COMPOSITION I	
& ENGL 1302	and RHETORIC AND COMPOSITION II	
For Life & Physical Science se	elect:	
PHYS 1443	GENERAL TECHNICAL PHYSICS I	
or PHYS 1441	GENERAL COLLEGE PHYSICS I	
PHYS 1444	GENERAL TECHNICAL PHYSICS II	
or PHYS 1442	GENERAL COLLEGE PHYSICS II	
For Mathematics select:		
MATH 1426	CALCULUS I	
MATH 2425	CALCULUS II	
For US History select:		
HIST 1301	HISTORY OF THE UNITED STATES TO 1865	
HIST 1302	HISTORY OF THE UNITED STATES, 1865 TO PRESENT	
EES Foundations		
Additional hours required in co	ore.	4
UNIV 1131	STUDENT SUCCESS	1
Computer Competence - pass	Computer Skills Placement test or any computer-related course such as:	
GEOL 4330	UNDERSTANDING GEOGRAPHIC INFORMATION SYSTEMS	
EES Specialization		
ENVR 3454	STATISTICS FOR EARTH AND ENVIRONMENTAL SCIENTISTS	4
ENVR 1301	INTRODUCTION TO ENVIRONMENTAL SCIENCE	3
ENVR 1330	GLOBAL WARMING	3
or GEOL 1340	WEATHER AND CLIMATE	
ENVR 2314	THE GLOBAL ENVIRONMENT AND HUMAN HEALTH	3
ENVR 3317	ENVIRONMENTAL HYDROLOGY	3
or ENVR 4325	TRACER HYDROLOGY	
ENVR 3387	ENVIRONMENTAL SCIENCE FIELD METHODS	3
ENVR 4303	TOPICS IN SUSTAINABILITY	3
ENVR 4308	ENVIRONMENTAL GEOCHEMISTRY	3
ENVR 4313	ENVIRONMENTAL REGULATION OF CHEMICAL HAZARDS	3
GEOL 4331	ANALYSIS OF SPATIAL DATA	3
or GEOL 4332	GLOBAL POSITIONING SYSTEM	
or GEOL 4333	REMOTE SENSING FUNDAMENTALS	

or GEOL 4334	GEOGRAPHIC DATA ANALYSIS	
GEOL 4405	METEOROLOGY AND CLIMATOLOGY	4
or GEOL 4465	PHYSICAL OCEANOGRAPHY AND LIMNOLOGY	
or GEOL 4425	PALEOCLIMATE & CLIMATE CHANGE	
BIOL 1441	BIOLOGY I FOR SCIENCE MAJORS: CELL AND MOLECULAR BIOLOGY	4
BIOL 1442	BIOLOGY II FOR SCIENCE MAJORS: ECOLOGY AND EVOLUTION	4
BIOL 3356	ENVIRONMENTAL SYSTEMS, BIOLOGICAL ASPECTS	3
or BIOL 3355	TOXICOLOGY	
CHEM 1441	GENERAL CHEMISTRY I	4
CHEM 1442	GENERAL CHEMISTRY II	4
Electives		
Select ENVR/GEOL/DATA/CHEM/BI	OL coursework sufficent to complete 120 hours with at least 36 hours at the 3000/4000 level.	19
Total Hours		120

SUGGESTED COURSE SEQUENCE

Details of a personal course sequence should be made with the guidance of the Earth and Environmental Sciences undergraduate advisor, particularly since many GEOL courses are not offered every semester. Biology minors should consult with the Earth and Environmental Sciences undergraduate advisor for minor requirements, and Chemistry minors should consult with the Chemistry and Biochemistry undergraduate advisor for minor requirements.

First Year				
	First Semester	Hours Second Se	emester	Hours
	UNIV 1131	1 BIOL 1442		4
	MATH 1426	4 ENGL 1302	2	3
	ENGL 1301	3 ENVR 133	D	3
	BIOL 1441	4 MATH 242	5	4
	ENVR 1301	3		
	15	14		
Second Year				
	First Semester	Hours Second Se	emester	Hours
	HIST 1301	3 CHEM 144	2	4
	CHEM 1441	4 ENVR 231	4	3
	PHYS 1441 or 1443	4 HIST 1302		3
	Social/Behavioral Science*	3 PHYS 1442	2 or 1444	4
	14	14		
Third Year				
Summer Session	Hours First Semester	Hours Second Se	emester	Hours
GEOL 3387	3 ENVR 3317 or 4325	3 POLS 2312	2	3
	ENVR 4313	3 GEOL 433	1, 4332, 4333, or 4334	3
	ENVR 4330	3 BIOL 3356	or 3355	3
	GEOL 3454	4 ENVR 430	В	3
	POLS 2311	3 Creative A	'ts [*]	3
	3	16		15
Fourth Year				
	First Semester	Hours Second Se	emester	Hours
	GEOL 4405, 4465, or 4425	4 ENVR 430	3	3
	ENVR/GEOL/DATA/BIOL/CHEM Electives	8 ENVR 345	7	4
	Language, Philosophy, and Culture	3 Foundation	al Component Area	3
		ENVR/GEO	DL/DATA/CHEM/BIOL Electives	4
	15	14		

Total Hours: 120

* See <u>General Core Requirements</u> (https://catalog.uta.edu/academicregulations/degreerequirements/generalcorerequirements/) for approved courses.

** Actual number of courses/hours and course sequence determined by appropriate department.

Advising Resources

First time in college students should plan to speak to a program advisor when starting their second year. or have an academic advising hold. Transfer students should contact program advising when enrolled or have an academic advising hold.

Location:

SH 328C

Email:

kaycee.nikses@uta.edu

Phone:

817-272-9686

Web:

Schedule an appointment (https://outlook.office365.com/book/PHYSGEOLEESADVISING@mavs.uta.edu/)