

**College of Agriculture and Life Science
Department of Crop and Soil Environmental Sciences
Bachelor of Science, Major in Environmental Science
For Students Graduating in Calendar Year 2020**

APPROVED
COMMISSION ON UNDERGRADUATE
STUDIES AND POLICIES

Curriculum for Liberal Education (CLE) Requirements (29 credits)

___ AAEC 1005	(3)	Econ of Food & Fiber (CLE 3)
___ <i>or</i> ECON 2005	(3)	Principles of Economics (CLE 3)
___ AAEC 1006	(3)	Econ of Food & Fiber (CLE 3)
___ <i>or</i> ECON 2006	(3)	Principles of Economics (CLE 3)
___ CHEM 1035	(3)	General Chemistry (CLE 4)
___ CHEM 1045	(1)	General Chemistry Lab (CLE 4)
___ CHEM 1036	(3)	General Chemistry (CLE 4)
___ CHEM 1046	(1)	General Chemistry Lab (CLE 4)
___ ENGL 1105	(3)	First-Year Writing (CLE 1)
___ ENGL 1106	(3)	First-Year Writing (CLE 1)
___ ENSC 3604	(3)	Fund Env Science (CLE 7)
___ MATH 1025	(3)	Elementary Calculus (CLE 5)
___ MATH 1026	(3)	Elementary Calculus (CLE 5)

Additional Curriculum for Liberal Education (7-9 credits)

CLE Area 2 (Ideas, Cultural Trad.) – select from approved list

_____ (3) _____
_____ (3) _____

CLE Area 6 (Creativity/Aesthetic Exp.) – select from approved list

_____ (1 or 3) _____

Specific Course Requirements for ENSC Major (51 credits)

___ BIOL 1105	(3)	Principles of Biology
___ BIOL 1106	(3)	Principles of Biology
___ CHEM 2535	(3)	Organic Chemistry
___ CHEM 2114	(3)	Analytical Chemistry
___ CHEM 2124	(1)	Analytical Chemistry Lab
___ ALS 1234	(1)	CALS First Year Seminar
___ CSES/ENSC/	(3, 1)	Soils, Soils Lab
___ GEOS 3114/3124		
___ CSES/ENSC 3634	(3)	Physics of Pollution
___ ENGL 3764	(3)	Technical Writing
___ ENSC 4414	(2)	Envir Monitoring and Analysis
___ ENSC 4864	(1)	Capstone: Env. Sci.
___ CSES/ENSC/	(3)	Environmental Soil Chemistry
___ CHEM 4734		
___ CSES/ENSC 4854	(3)	Wetland Soils and Mitigation
___ GEOG 2084	(3)	Principles of GIS
___ <i>or</i> GEOG/GEOS 4354	(3)	<i>or</i> Intro Remote Sensing
___ <i>or</i> FREC 4114	(3)	<i>or</i> Info Tech Nat Res Mgt
___ <i>or</i> BSE 4344	(3)	<i>or</i> GIS for Engineers

___ GEOS 2104	(3)	Elements of Geo
___ <i>or</i> GEOS 1004	(3)	<i>or</i> Intro to Earth Sci
___ GEOS 4804	(3)	Groundwater Hydrology
___ MATH 2024	(3)	Intermediate Calculus
___ PHYS 2205	(3)	General Physics
___ STAT 3615	(3)	Biological Statistics

Major Specific Requirements (Choose 15 Credits from the list below)

___ CSES/ENSC 3614	(3)	Soil Phys and Hydro Prop
___ CSES/ENSC 3644	(3)	Plants Mat for Env Res
___ CSES/ENSC 4134	(3)	Soil Genesis and Classification
___ CSES/ENSC/BIOL/4164	(3)	Env Microbiology
___ CSES/ENSC 4314	(3)	Water Quality
___ CSES/ENSC 4444	(3)	Managed Ecosystems
___ CSES 4644	(3)	Land-Based Waste Treatment
___ CSES/ENSC 4764	(3)	Bioremediation
___ CSES/ENSC 4774	(3)	Rec. of Disturbed Lands
___ FREC 3104	(3)	Prin of Watershed Hydro

Technical Electives (Choose at least 18 credits from the list below (or approved by the ENSC Program Director).

___ AAEC 3314	(3)	Environmental Law
___ AAEC 3324	(3)	Env Sust Development Economics
___ ALS/NR 4614	(3)	Watershed Assess Mgt Policy
___ BIOL 2604/2614	(3, 1)	General Microbiology and Lab
___ BIOL 2804	(3)	Ecology
___ BIOL 4004	(4)	Freshwater Ecology
___ BIOL/ENT 4354	(4)	Aquatic Entomology
___ BIOL/ENT/FIW 4484	(4)	Freshwater Biomonitoring
___ CEE 3104	(3)	Intro to Env. Eng.
___ CEE 4134	(3)	Sustainable Systems
___ CEE 4174	(3)	Solid and Hazardous Waste Mgt
___ CHEM 2536	(3)	Organic Chemistry
___ CHEM 2545	(1)	Organic Chemistry Lab
___ CHEN 2546	(1)	Organic Chemistry Lab
___ CHEM 4615	(3)	Phys Chem Life Sci
___ CHEM 4514	(3)	Green Chemistry
___ CSES/GEOG/GEOS 3304	(3)	Geomorphology
___ CSES 3144	(3)	Soil Description and Interpretation
___ CSES 4214	(3)	Soil Fertility and Management
___ CSES 4964*	(1-3)	Field Study

__ ENGR 3124	(3)	Intro to Green Engr	__ ENGR 4134	(3)	Env Life Cycle Asses
__ FIW 4534	(3)	Ecology and Mang of Wetlands	__ GEOG 4314	(3)	Spatial Analysis in GIS
__ FIW 4624	(3)	Marine Ecology	__ GEOG/GEOS 4354	(3)	Intro to Remote Sensing
__ FREC 2314	(2)	Forest Biology and Dendrology	__ GEOS 3034	(3)	Oceanography
__ FREC 2324	(1)	Dendrology Lab	__ GEOS 3404	(3)	Elements of Structural Geology
__ FREC 3604	(3)	Climate Science	__ GEOS 4634	(3)	Environmental Geochemistry
__ FREC/CSES 4334	(3)	Agroforestry	__ UAP/PSCI 3344	(3)	Global Environmental Issues
__ FREC 4354	(3)	Forest Soil and Watershed Mgt	__ UAP 3354	(3)	Environmental Policy and Planning
__ FREC 4374	(3)	Forested Wetlands	__ UAP 4264	(3)	Environmental Ethics and Policy
__ FREC 4784	(3)	Wetland Hydro and Biogeochem	__ UAP 4344	(3)	Law of Critical Env Areas
__ GEOG 3314	(3)	Cartography	__ UAP 4374	(3)	Land Use/Env Policy and Planning
__ GEOG/GEOS 4084	(3)	Modeling with GIS	__ UAP 4384	(3)	Pollution Control

No courses may be taken P/F

* No more than 3 credits of field study can be used as a technical elective.

TOTAL CREDITS REQUIRED FOR GRADUATION = 120 with required minimum 2.0 GPA overall and in-major

Satisfactory Progress Toward Degree

By the end of the academic year in which the student has attempted 60 credits (including transfer, advanced placement, advanced standing and credit by examination), "satisfactory progress" toward a B.S. degree in ENSC will include:

1. Having a grade point average of at least 2.0, overall and in major (includes classes in BIOL, BSE, CEE, CHEM, CSES, ENSC, ENT, FIW, FREC, GEOS, PHYS)
2. Passing the following:
 - At least 24 credits that apply to the Curriculum for Liberal Education
 - BIOL 1105 and 1106
 - ALS 1234, CSES 3114 and 3124
 - ENSC 3604
 - 12 credits of CHEM
 - 9 credits of MATH and/or STAT

Note: A sequence of two foreign language courses is required unless two years of the same high school foreign language or 6 transfer credits of the same foreign language are completed. These credits **do not** count toward graduation requirements.

Note: Some courses listed on this checksheet may have prerequisites. Be sure to consult the University Catalog or check with your Academic Advisor.