

College of Agriculture and Life Science – School of Plant Environmental Sciences - Bachelor of Science: Environmental Science
For Students Graduating in Calendar Year 2021

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

— AAEC 1005	(3)	Econ of Food & Fiber (CLE 3) – B, SII
— or ECON 2005	(3)	Principles of Economics (CLE 3) – B, SI, SII
— AAEC 1006	(3)	Econ of Food & Fiber (CLE 3) – B
— or ECON 2006	(3)	Principles of Economics (CLE 3) – B, SI, SII
— CHEM 1035	(3)	General Chemistry (CLE 4) – B, SI, SII
— CHEM 1045	(1)	General Chemistry Lab (CLE 4) – B, SI, SII
— CHEM 1036	(3)	General Chemistry (CLE 4) – B, SI, SII
— CHEM 1046	(1)	General Chemistry Lab (CLE 4) – S, SI, SII
— ENGL 1105	(3)	First-Year Writing (CLE 1) – B, SII
— ENGL 1106	(3)	First-Year Writing (CLE 1) – B, SI
— ENSC 3604	(3)	Fund Env Science (CLE 7) – F
— MATH 1025	(3)	Elementary Calculus (CLE 5) – B, SI, SII
— MATH 1026	(3)	Elementary Calculus (CLE 5) – B, SII

Additional Curriculum for Liberal Education (7-9 credits)

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

_____ (3)	_____ - B, W, SI, SII
_____ (3)	_____ - B, W, SI, SII

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

_____ (1 or 3)	_____ - B, W, SI, SII
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Specific Course Requirements for ENSC Major (51 credits)

— BIOL 1105	(3)	Principles of Biology – F, W, SI
— BIOL 1106	(3)	Principles of Biology – S, SII, W
— CHEM 2535	(3)	Organic Chemistry – F, SI
— CHEM 2114/2124	(3, 1)	Analytical Chemistry, Lab – B, SI
— ALS 1234	(1)	CALS First Year Seminar – F
— CSES 3114/3124	(3, 1)	Soils, Soils Lab – F
— CSES/ENSC 3634	(3)	Physics of Pollution – F
— ENGL 3764	(3)	Technical Writing – B, SI, SII, W
— ENSC 4414	(2)	Envir Monitoring and Analysis – S
— ENSC 4864	(1)	Capstone: Env. Sci.-
— CSES/ENSC 4734	(3)	Environmental Soil Chemistry – S
— CSES/ENSC 4854	(3)	Wetland Soils and Mitigation – F
— GEOG 2084	(3)	Principles of GIS – F, S
— or GEOG/GEOS 4354	(3)	or Intro Remote Sensing – F, SII
— or FREC 4114	(3)	or Info Tech Nat Res Mgt – S
— or BSE 4344	(3)	or GIS for Engineers – S
— GEOS 1004 or 2104	(3)	Physical Geology – B or Elements of Geo - B
— GEOS 4804	(3)	Groundwater Hydrology – B
— MATH 2024	(3)	Intermediate Calculus – B
— PHYS 2205	(3)	General Physics – B, SI, W
— STAT 3615	(3)	Biological Statistics – B, SI, SII

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

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

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

— AAEC 3314	(3)	Environmental Law – S
— AAEC 3324	(3)	Env Sust Development Economics – S
— ALS/NR 4614	(3)	Watershed Assess Mgt Policy – S
— BIOL 2604/2614	(3, 1)	General Microbiology and Lab – F, S, SI
— BIOL 2804	(3)	Ecology – F, S, SII
— BIOL 4004	(4)	Freshwater Ecology – F
— BIOL/ENT 4354	(4)	Aquatic Entomology – S
— BIOL/ENT/FIW 4484	(4)	Freshwater Biomonitoring - V
— CEE 3104	(3)	Intro to Env. Eng. - B
— CEE 4134	(3)	Sustainable Systems - S
— CEE 4174	(3)	Solid and Hazardous Waste Mgt – F
— CHEM 2536	(3)	Organic Chemistry – S, SII
— CHEM 2545	(1)	Organic Chemistry Lab – S, SI
— CHEN 2546	(1)	Organic Chemistry Lab – S, SII
— CHEM 4615	(3)	Phys Chem Life Sci – F
— CHEM 4514	(3)	Green Chemistry – F, S
— CSES/GEOG/GEOS 3304	(3)	Geomorphology – S
— CSES 3144	(3)	Soil Description and Interpretation – F
— CSES 4214	(3)	Soil Fertility and Management – F
— CSES 4964*	(1-3)	Field Study – F, S, SI, SII
— ENGR 3124	(3)	Intro to Green Engr – F, S
— ENGR 4134	(3)	Env Life Cycle Asses – S
— FIW 4534	(3)	Ecology and Mang of Wetlands – F
— FIW 4624	(3)	Marine Ecology – S
— FREC 2314	(2)	Forest Biology and Dendrology – F
— FREC 2324	(1)	Dendrology Lab – F, S
— FREC 3604	(3)	Climate Science – S
— FREC 3754	(3)	Watersheds Water Quality Monitoring – F

__FREC/CSES 4334	(3)	Agroforestry – F
__FREC 4354	(3)	Forest Soil and Watershed Mgt – F
__FREC 4374	(3)	Forested Wetlands – F
__FREC 4784	(3)	Wetland Hydro and Biogeochem - S
__GEOG 3314	(3)	Cartography – F, S
__GEOG/GEOS 4084	(3)	Modeling with GIS – F, S
__GEOG 4314	(3)	Spatial Analysis in GIS – S
__GEOG/GEOS 4354	(3)	Intro to Remote Sensing – F, SII
__GEOS 3034	(3)	Oceanography – S

__GEOS 3404	(3)	Elements of Structural Geology – F
__GEOS 4634	(3)	Environmental Geochemistry – F
__UAP/PSCI 3344	(3)	Global Environmental Issues – B
__UAP 3354	(3)	Environmental Policy and Planning – F
__UAP 4264	(3)	Environmental Ethics and Policy – S
__UAP 4344	(3)	Law of Critical Env Areas – F
__UAP 4374	(3)	Land Use/Env Policy and Planning – F

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 all classes in BIOL, BSE, CEE, CHEM, CSES, ENSC, ENT, FIW, FREC, GEOS, PHYS)
2. Declaring an Option within the ENSC Major
3. 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

Total credits for graduation = 120 with a required minimum 2.0 GPA overall and in-major (includes all classes in BIOL, BSE, CEE, CHEM, CSES, ENSC, ENT, FIW, FREC, GEOS, PHYS)

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

KEY:

- B – class is offered both fall and spring semesters
- F – class is offered only in the fall semester
- S – class is offered in the spring semester
- V – class is offered at variable times
- SI – class is offered during summer semester I
- SII – class is offered during summer semester II