Pathways to General Education (44-47 credits)

1. Discourse
   __ (3, foundational) ENGL 1105: First-Year Writing – F, S
   __ (3, foundational) ENGL 1106: First-Year Writing – F, S, SI, SII
   __ (3, advanced/applied) __________________________ – F, S, W, SI, SII

2. Critical Thinking in the Humanities
   __ (3) _________________________________ - F, S, W, SI, SII

3. Reasoning in the Social Sciences
   __ (3) _______________ - F, S, W, SI, SII
   __ (3) _______________ - F, S, W, SI, SII

4. Reasoning in the Natural Sciences
   __ (3) *CHEM 1035: General Chemistry – F, S, SI, SII
   __ (1) *CHEM 1045: General Chemistry Laboratory – F, S, SI, SII
   __ (3) *CHEM 1036: General Chemistry – F, S, SI, SII
   __ (1) *CHEM 1046: General Chemistry Laboratory – S, SI, SII

5. Quantitative and Computational Thinking
   __ (3, foundational) - MATH 1025: Elementary Calculus – F, S, SI, SII
   __ (3, foundational) - *MATH 1026: Elementary Calculus – F, S, SI, SII
   __ (3, advanced) - *STAT 3615: Biological Statistics – F, S, SI, SII

6. Critique and Practice in Design and the Arts
   __ (3, design) ___________________________- F, S, W, SI, SII
   __ (3, arts) ___________________________ - F, S, W, SI, SII

7. Critical Analysis of Identity and Equity in the United States
   (may be double-counted with another core concept)
   __ (3) ___________________________- F, S, W, SI, SII

Common Degree Core Requirements (20)

1 (1) ALS 1234: CALS First Year Seminar or SPES 1004: First Year Seminar - F
2 (3) BIOL 1105: Principles of Biology – F, W, SI
3 (3) BIOL 1106: Principles of Biology – S, W, SI, SII
4 (3) *CSES/ENSC 3114 or GEOS 3614: Soils – F
5 (1) *CSES/ENSC 3124 or GEOS 3624: Soils Laboratory - F
6 (3) *ENSC 3604: Fundamentals of Environmental Science - F
8 (3) GEOS 1004: Introduction to Earth Sciences or GEOS 2104: Elements of Geology – F, S

Major Requirements for Ecological Restoration (21 credits)

1 (3) *BIOL/HORT 2304: Plant Biology – F, S
2 (3) BIOL 2804: Ecology* – F, S, SI, SII
3 (3) BIOL 3204: Plant Taxonomy* - S
4 (3) ENSC 4244: Ecological Restoration*
5 (3) CSES/ENSC 4734: Plants for Environmental Restoration* – S
6 (3) *CSES/ENSC 4774: Reclamation of Disturbed Lands – F (even years)
7 (3) PPWS 4604: Biological Invasions* - F

Ecology Restricted Electives (choose 9 credits†)

1 (3) ALS 3404: Ecological Agriculture – F
2 (3) *BIOL 4004: Freshwater Ecology – F
3 (3) BIOL 4114: Global Change Ecology*
4 (3) CSES/FREC 4334: Agroforestry - F
5 (3) *CSES/ENSC 4764: Bioremediation - F
6 (3) * CSES 4544: Forage Crop Ecology- S
7 (3) HORT/FREC 2134: Plants & Greenspaces for Urban Communities–F
College of Agriculture and Life Science – School of Plant and Environmental Sciences
Bachelor of Science in Environmental Science – Major in Ecological Restoration
For Students Entering under UG Catalog 2022-2023

Plant and Soil Sciences Restricted Electives (choose 6 credits)
(3) HORT 2244: Plant Propagation – S
(3) *HORT 3324: Herbaceous Landscape Plants-F
(3) *CSES 4064: Soil Microbiology – F
(3) *CSES 4174: Soil Evaluation and Sampling – S
(3) *CSES 4214: Soil Fertility and Management - F
(3) *CSES/ENSC 4854: Wetlands Soils and Mitigation – F

Human Dimensions Restricted Elective (choose 3 credits)
(3) AAEC 3314: Environmental Law - S
(3) *AAEC 3324: Environmental Sustain Dev Econ - S
(3) *ALCE 4304: Community Education & Development - F
(3) *UAP/PSCI 3344: Global Environmental Issues – F, S
(3) UAP 3354: Environmental Policy & Planning – F
(3) UAP 4344: Law of Critical Environmental Areas – S

Restricted Electives (choose 12 credits)
(3) *BIOL 2504: General Zoology * - S
(3) *CSES/ENSC/BIOL 4164: Environmental Microbiology – S
(3) *CSES/ENSC 3614: Soil Physical & Hydrological Properties – S
(3) *CSES/ENSC CHEM 4734: Environmental Soil Chemistry – S
(3) *ENSC 4414: Monitoring & Analysis of the Environment – S
(3) *CSES/ENSC 4314: Water Quality - S
(3) FIW 2314: Wildlife Biology - S
(3) FIW 2324: Wildlife Field Biology – F, S
(3) *FIW 4534: Ecology & Management of Wetland Systems – F
(3) *FIW 4114: Biodiversity Conservation
(3) GEOG/WATR 2004: Water, Environment & Society - F
(3) GEOG 3104: Environmental Problems, Population & Develop - S
(3) *GEOG/GEOS 4084: Modeling with GIS – F, S
(3) *GEOG 4314: Analysis in GIS – S
(3) HORT/FREC 2134: Plants & Greenspaces in Urban Communities – F
(3) HORT 3325: Woody Landscape Plants - F
(3) HORT 3326: Woody Landscape Plants - S
(3) *UAP 4374: Land Use and Environmental Policy & Planning – F

Free Electives (number needed to complete 120 credits)
( ) __________________________________________________________________________
( ) __________________________________________________________________________
( ) __________________________________________________________________________

Notes:
● Total Hours Required: 120
● GPA Requirements:
  ○ Overall GPA: 2.0 each semester
  ○ In-major GPA: 2.0 By Graduation
    ■ Includes classes in: BIOL, CHEM, CSES, ENSC, FREC, GEOS, PHYS
  ○ Pass CHEM 1035 and 1036 with grade of C- or better
● Upon having attempted 60 semester credits (including transfer, advanced placement, advanced standing and credit by examination), satisfactory progress toward a B.S. degree in ENSC will include passing the following:
  ○ At least 24 credits that apply to the Pathways of General Education
  ○ BIOL 1105, 1106, CSES/ENSC 3114, 3124, ENSC 3604, SPES 1004 or ALS 124 and
  ○ 8 credits of CHEM with 6 credits of MATH and/or STAT
● Language Study Requirement: a sequence of two foreign language courses is required or equivalent transfer/high school credit (6cr.)
● *Some courses listed on the checksheet may have prerequisites or corequisites; please consult the University Course Catalog or check with your advisor.
● F (fall), S (spring), W (winter), SI (summer I), and SII (summer II) indicate the term a course is offered. Course offerings are subject to change