Pathways to General Education (44-47 credits)

Concept 1 – Discourse (9 credit hours)
1F – Foundational
____ (3) ENGL 1105 First-Year Writing – F, S
____ (3) ENGL 1106 First-Year Writing – F, S, SI, SII

1A – Advanced/Applied
____ (3) – F, S, W, SI, SII

Concept 2 – Critical Thinking in the Humanities (6 credits)
____ (3) – F, S, W, SI, SII
____ (3) – F, S, W, SI, SII

Concept 3 – Reasoning in the Social Sciences (6 credits)
____ (3) AAEC 1005 Econ Food Fiber Sys
or ECON 2005 Principles of Economics – F, S
____ (3) – F, S, W, SI, SII

Concept 4 – Reasoning in the Natural Sciences (8 credits)
____ (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* – F, S, SI, SII

Concept 5 – Quantitative and Computational Thinking (11 credits)
5F – Foundational (8 credits)
____ (3) MATH 1025: Elementary Calculus – F, S, SI, SII
____ (3) MATH 1026: Elementary Calculus – F, S, SI, SII

5a – Advanced/Applied (3 credits)
____ (3) STAT 3615 Biological Statistics* – F, S, SI, SII

Concept 6 – Critique and Practice in Design and the Arts (6 credits)
6d – Design
____ (3) – F, S, W, SI, SII
6a – Arts
____ (3) – F, S, W, SI, SII

Concept 7 – Critical Analysis of Identity and Equity in the United States (3 credits)

Common Degree Core Requirements (21)

____ (1) SPES 1004: First Year Seminar or ALS 1234: CALS First Year Seminar - F
____ (3) BIOL 1105: Principles of Biology – F, W, SI
____ (3) BIOL 1106: Principles of Biology – S, W, SII
____ (3) CSES/ENSC 3114 or GEOS 3614: Soils* – F
____ (1) CSES/ENSC 3124 or GEOS 3624: Soils Laboratory* - F
____ (3) ENSC 3604: Fundamentals of Environmental Science* - F
____ (3) GEOG 2084: Principles of GIS – F, S or GEOG 4354: Introduction to Remote Sensing or FREC 4114 Informational Technologies for Natural Resources Management* – F
____ (3) GEOS 1004: Introduction to Earth Science
or GEOS 2104 Elements of Geology - F
____ (1) ENSC 4864: Environmental Science Capstone*

Major Requirements for Ecological Restoration (21 credits)

____ (3) BIOL/HORT 2304: Plant Biology* – F, S
____ (3) BIOL 2804: Ecology* – F, S, SII
____ (3) BIOL 3204: Plant Taxonomy* - S
____ (3) ENSC 3244: Ecological Restoration*
____ (3) CSES/ENSC 3644: Plant Materials for Environmental Restoration * – S
____ (3) CSES/ENSC 4774: Reclamation of Disturbed Lands* – F (even years)
____ (3) PPWS 4604: Biological Invasions* - F

Ecology Restricted Electives (choose 9 credits)

____ (3) ALS 3404: Ecological Agriculture – F
____ (4) BIOL 4004: Freshwater Ecology* – F
____ (3) BIOL 4114: Global Change Ecology*
____ (3) CSES/FREC 4334: Agroforestry - F
____ (3) CSES/ENSC 4764: Bioremediation - F
____ (3) CSES 4554: Forage Crop Ecology- S
____ (3) HORT/FREC 2134: Plants & Greenspaces Urban Com – F,W
## Plant and Soil Sciences Restricted Electives (choose 6 credits)

- (3) HORT 2244: Plant Propagation – S
- (3) HORT 4064: Soil Microbiology* – F
- (3) HORT 3324: Herbaceous Landscape Plants*
- (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 Environ Issues*– F, S
- (3) UAP 3354: Environ Policy & Plan – 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/CHM 4734: Environmental Soil Chemistry* – S
- (2) 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 and Development - S
- (3) GEOG/GEOS 4084: Modeling with GIS* – F, S
- (3) GEOG 4314: Analysis in GIS* – S
- (3) HORT 2134: Plants & Greenspaces Urban Com – F, W
- (3) HORT 3325: Woody Landscape Plants – F

- (3) HORT 3326: Woody Landscape Plants - S
- (3) UAP 4374: Land Use and Environ* – F

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

- ( )
- ( )
- ( )

## Note:

- **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, and ENSC
- • Upon having attempted 60 semester credits (including transfer, advanced placement, advanced standing, and credit by examination) satisfactory progress towards a B.S. degree in ENSC will include passing the following:
  - At least 24 semester credits that meet the Pathways of General Education requirements,
  - BIOL 1105, 1106, CSES 3114, 3124, ENSC 3604, SPES 1004 or ALS 1234, and
  - 8 credits of CHEM, with 6 credits of MATH or STAT
- • Language Study Requirement: Sequence of two foreign language courses or equivalent transfer/high school credit (6 cr.)
- • *Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor.

F – Fall, S – Spring, W – Winter, SI – Summer, Part I, SII – Summer, Part II indicate the term a course is offered. Course offerings are subject to change.

*Prerequisites: Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor.