

**College of Agriculture and Life Sciences – School of Plant and Environmental Sciences**  
**Bachelor of Science: Crop and Soil Environmental Sciences – Turfgrass Management Option**  
**For students graduating in calendar year 2022 and for student date of entry under UG Catalog 2020-2021**

**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) \*ENGL 3764: Technical Writing – F, S, W, SI, SII

**2. Critical Thinking in the Humanities**

- \_\_\_ (3) \_\_\_\_\_ - F, S, W, SI, SII
- \_\_\_ (3) \_\_\_\_\_ - F, S, W, SI, SII

**3. Reasoning in the Social Sciences**

- \_\_\_ (3) AAEC 1005: Econ Food Fiber Sys or ECON 2005: Principles of Economics – F, S
- \_\_\_ (3) AAEC 1006: Econ Food Fiber Sys or ECON 2006: Principles of Economics – F, S

**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 1014: Precalc with Transcendental – F, S, SI, SII
- \_\_\_ (3, foundational) \_\_\_\_\_ - F, S, W, SI, SII
- \_\_\_ (3, advanced) \_\_\_\_\_ - F, S, W, 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

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

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**Common Degree Core Requirements (27 credits)**

- \_\_\_ (1) ALS 1234: CALS First Year Seminar – F
- \_\_\_ (3) ALCE 3634: Comm Ag & Life in Speaking – F, S,  
or COMM 2004: Public Speaking – F, S, SI, SII
- \_\_\_ (3) BIOL 1105: Principles of Biology – F, W, SI
- \_\_\_ (3) CSES 2444: Agronomic Crops - F
- \_\_\_ (3) \*CSES/ENSC 3114 or GEOS 3614: Soils – F
- \_\_\_ (1) CSES/ENSC 3124 or GEOS 3624: Soils Laboratory - F
- \_\_\_ (3) CSES/HORT 3444: World Crops & Systems – S
- \_\_\_ (3) \*CSES 4214: Soil Fertility and Management - F
- \_\_\_ (3) ENSC 1015: Found Environmental Sci - F  
or ENSC 1016: Found Environmental Sci - S
- \_\_\_ (4) \*PPWS 4104: Plant Pathology - F

**Turfgrass Management Option Requirements (21 credits)**

- \_\_\_ (3) \*AAEC 2434: Foundations of Agribusiness – F, S
- \_\_\_ (3) \*AAEC/MGT 3454: Small Bus Mgt and Ent - S
- \_\_\_ (3) CSES 2564: Turfgrass Management - F
- \_\_\_ (3) \*CSES 3564: Golf and Sports Turf Mgt - F
- \_\_\_ (3) CSES 4864: Capstone: Crop & Soil Sciences - S
- \_\_\_ (3) ENT 4254: Insect Pest Management - S
- \_\_\_ (3) HORT 2234: Envir Factors in Hort - S

**Restricted Electives (minimum 18 credits) from approved courses listed on back or complete an approved minor – see your advisor for approval**

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- \_\_\_ (3) AAEC 3314: Environmental Law - S
- \_\_\_ (3) \*AAEC 3504: Marketing Ag Products – F
- \_\_\_ (3) AAEC 3604: Agricultural Law – F
- \_\_\_ (3) ALCE 3014: Leadership Effective for Ag - F
- \_\_\_ (3) \*BIOL 2604: General Microbiology – F, S
- \_\_\_ (3) \*BSE 2484: Engines Power Trains – F, S
- \_\_\_ (3) CSES 2244: Ag Global Food Sec and Health - F
- \_\_\_ (3) CSES 3144: Soil Description and Inter - F
- \_\_\_ (3) \*CSES/ENSC 3644: Plant for Env Rest – S
- \_\_\_ (2) \*ENT/BIOL 3014: Insect Biology - F
- \_\_\_ (2) \*ENT/BIOL 3024: Insect Biology Laboratory - F
- \_\_\_ (3) \*ENT/PPWS 4264: Pesticide Usage – S
- \_\_\_ (3) GEOG 1514: Introduction to Meteorology - F
- \_\_\_ (3) \*HORT/FREC 2134: Plants & Greenspace Urban Com
- \_\_\_ (3) HORT 2244: Plant Propagation – S
- \_\_\_ (3) \*HORT/BIOL 2304: Plant Biology – F, S
- \_\_\_ (3) HORT/FST 3114: Wines and Vines – F, S
- \_\_\_ (2) \*HORT 3664: Hardscape Materials & Instal - F
- \_\_\_ (3) MGT 3304: Mgt Th & Lead Pract – F, S
- \_\_\_ (3) PPWS 2754: Weeds that Shape our World - F

**Approved Minors**

- Agribusiness Management
- Agricultural and Applied Economics
- Civic Agriculture and Food Systems
- Entomology
- Environmental Economics
- Environmental Sciences
- Global Food Security and Health
- Horticulture
- Leadership & Social Change
- Meteorology
- Plant Health Sciences
- Viticulture
- Wetland Science

**NOTE:**

Total Hours Required: 120

\*Some courses listed on the checksheet may have prerequisites; please consult the University Course Catalog or check with your advisor.

F (fall), S (spring), W (winter), SI (summer I), and SII (summer II) let students know the term the course is offered – when a course is offered is subject to change so always check the course catalog.

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 CSES will include:

1. Declaring an option within the CSS major
2. Passing the following:
  - At least 24 credits that apply to the Pathways of General Education
  - CHEM 1035 and 1036
  - ALS 1234, CSES/ENSC 3114 and CSES/ENSC 3124
  - 6 credits of Math

GPA Requirements:

- Overall GPA: 2.0 (each semester in order to be in good academic standing)
- In-major GPA: 2.0 (by the time the student graduates)
  - Includes classes in: CSES, ENSC, ENT, HORT, and PPWS

Language Study Requirement: 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.