

Crop and Soil Sciences — Turfgrass Option (CSTU)

Freshman

| Fall | Hours | Spring | Hours |
|--|-----------|--|------------|
| CSES 2000 Basic Crop Science ¹ | 4 | Core Social Science ^{2,3} | 6 |
| BIOL 1020 Principles of Biology & BIOL 1021 Principles of Biology Laboratory | 4 | Core History | 3 |
| MATH 1130 Pre-Calculus Trigonometry or 1120 Pre-Calculus Algebra | 3 | ENGL 1120 English Composition II | 3 |
| ENGL 1100 English Composition I | 3 | CHEM 1110 General Chemistry I or 1030 Fundamentals Chemistry I CHEM 1111 General Chemistry I Laboratory or 1031 Fundamental Chemistry I Laboratory | 3 1 |
| | 14 | | 16 |

Sophomore

| Fall | Hours | Spring | Hours | Summer | Hours |
|--|-----------|---|-----------|----------------------|----------|
| CSES 2040 Basic Soil Science | 4 | CSES 3150 Turfgrass Management | 4 | CSES 3920 Internship | 3 |
| STAT 2510 Statistics for Biological and Health Sciences | 3 | CHEM 1120 General Chemistry for Scientists and Engineers II or 1040 Fundamental Chemistry II | 3 | | |
| BIOL 1030 Organismal Biology | 3 | CHEM 1121 General Chemistry II Laboratory or 1041 Fundamental Chemistry II Laboratory | 1 | | |
| BIOL 1031 Organismal Biology Laboratory | 1 | BIOL 3100 Plant Biology or HORT 3000 Growth and Development of Horticultural Plants | 4 | | |
| COMM 1000 Public Speaking | 3 | Core Literature | 3 | | |
| | 14 | | 15 | | 3 |

Junior

| Fall | Hours | Spring | Hours | Summer | Hours |
|--|-----------|--|-----------|----------------------|----------|
| CSES 5160 Advanced Turfgrass Management | 3 | CSES 5060 Soil Microbiology Lecture | 3 | CSES 3920 Internship | 3 |
| BIOL 3200 General Microbiology | 3 | CSES 5061 Soil Microbiology Lab | 1 | | |
| BIOL 3201 General Microbiology Laboratory | 1 | CSES 5020 Nutrient Management | 3 | | |
| Core Literature II or Humanities ⁴ | 3 | Plant Protection ⁶ | 4 | | |
| Directed Elective ⁵ | 4 | Core History II or Social Science ³ | 3 | | |
| | 14 | | 14 | | 3 |

Senior

| Fall | Hours | Spring | Hours |
|--|--------------|---------------------------------|--------------|
| CSES 5000 Environmental Quality | 3 | CSES 4950 Senior Seminar | 2 |
| Precision Ag ⁷ | 4 | UNIV 4AA0 Achieve the Creed | 0 |
| Directed Elective ⁵ | 4 | Soil and Water ⁸ | 3-4 |
| Core Fine Arts | 3 | Plant Protection ⁶ | 8 |
| | 14 | | 13-14 |

Total Hours: 120-121

¹ Courses in boldface type are major courses and require a 2.0 minimum GPA for graduation.

² Suggested Core Social Studies:

AGEC 1000 Global Issues in Food, Agriculture, Development, and Environment

COUN 2000 Living and Communicating in a Diverse Society

SUST 2000 Introduction to Sustainability

ECON 2020 Principles of Microeconomics

³ Please see advisor. Student choice on Literature or History sequence. University requires 12 hours of Social Science and Humanities core.

⁴ Suggested Core Humanities:

PHIL 1010 Introduction to Logic

PHIL 1020 Introduction to Ethics

PHIL 1110 Ethical and Conceptual Foundations of Science

PHIL 1120 Introduction to Environmental Ethics

⁵ Directed Electives (8hrs)

(Substitutions to this list must be approved by the program coordinator and be at or above 3000-level.):

CHEM 2070 Organic Chemistry I

CHEM 2071 Organic Chemistry I Laboratory

CHEM 2030 Survey of Organic Chemistry

BATM 3560 Turf Systems Irrigation Design

HORT 3210 Woody Landscape Plant Identification II

HORT 3220 Arboriculture

HORT 5210 Landscape Bidding, Installation and Maintenance

HORT 3280 Landscape Construction

CSES 5030 Advanced Crop Science

CSES 3300 Plant Genetics and Crop Improvement

CSES 5500 Forage Production and Utilization

CSES 5150 Soil Morphology

CSES 5080 Soil Resources and Conservation

CTCT 2100 Power Equipment Technology

CTCT 4140 Agricultural Structure and Metal Fabrication Technology

⁶ Plant Protection: (12hrs)

CSES 3120 Principles of Weed Science

PLPA 3000 General Plant Pathology

ENTM 3040 General Entomology

ENTM 5360 Landscape Entomology

ENTM 5330 Integrated Pest Management

PLPA 5050 Plant Disease Diagnosis

⁷ Precision Agriculture (3-4 hr)

GEOG 5700 Quantitative Methods and Spatial Analysis

GEOG 5830 Geographic Information Systems

BSEN 5220 Geospatial Technologies in Biosystems

⁸ Soil and/or Water: (3-4hr)

CSES 5080 Soil Resources and Conservation

CSES 5250 Aquatic Sediments
CSES 5800 Climate, Water, and Life
FISH 5220 Water Science
FISH 5320 Limnology