

DEPARTMENT OF CROP, SOIL, AND ENVIRONMENTAL SCIENCES

Major in Environmental Soil and Water Science

Check Sheet for Environmental Soil and Water Science (ESWS) Major

2023-2024

Name:

I.D. Number:

Advisor:

University Requirements: 1 hour²

- UNIV 1001 University Perspectives

Communications: 12 hours

- ENGL 1013 Composition I
- ENGL 1023 Composition II
- COMM 1313 Public Speaking
- ACOM 3143 Communicating Agriculture to the Public **OR**
 - CSES 3023 Crop, Soil and Environmental Sciences Colloquium

US History or Government: 3 hours

- HIST 2003 **or** HIST 2013 **or** PLSC 2003

Mathematics: 6 hours

- MATH 1203 College Algebra
- MATH 1213 Plane Trigonometry³

Physical and Biological Sciences: 35 hours

- BIOL 1543 Principles of Biology
 - BIOL 1541L Principles of Biology Lab
- BIOL 2013 General Microbiology
 - BIOL 2011L General Microbiology Lab
- BIOL 3863 General Ecology
 - BIOL 3861L General Ecology Lab **OR**
- ENSC 3223 Ecosystems Assessment
 - ENSC 3221L Ecosystems Assessment Lab
- CSES 1203 Intro to Plant Sciences
- CHEM 1103 University Chemistry I
 - CHEM 1101L University Chemistry I Lab
- CHEM 1123 University Chemistry II
 - CHEM 1121L University Chemistry II Lab
- CHEM 2613 Organic Physiological Chemistry
 - CHEM 2611L Organic Physiological Chemistry Lab **OR**
- CHEM 3603 Organic Chemistry I
 - CHEM 3601L Organic Chemistry I Lab
- GEOS 1113 Physical Geology
 - GEOS 1111L Physical Geology Lab
- PHYS 2013 College Physics I
 - PHYS 2011L College Physics I Lab

Fine Arts/Humanities: 6 hours

Choose 3 hours from Fine Arts and 3 hours from Humanities:²

Check for completion	Course I. D.:	Course Name:
<input type="checkbox"/>		
<input type="checkbox"/>		

Social Sciences: 9 hours

Choose 9 hours from Social Science Core:²

Check for completion	Course I. D.:	Course Name:
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

ESWS Major Core: 32-33 hours⁵

Environmental Science Core (17 hours):

- CSES 2203 Soil Science
 - CSES 2201L Soil Science Lab
- ENSC 1003 Environmental Science
 - ENSC 1001L Environmental Science Lab
- ASTM 2903 AHES Applications of Microcomputers
- ENSC 3003 Introduction to Water Science
- STAT 2303 Principles of Statistics

Soil Science core (3-4 hours):

Choose at least 3 hours from the following:

- CSES 3214 Soil Resources and Nutrient Cycles
- CSES 4224 Soil Fertility
- CSES 4253 Soil Classification and Genesis
- CSES 4553 Wetland Soils
- ENSC 3263 Soil & Water Conservation
- ENSC 4263 Environmental Soil Science

Water Science core (3 hours):

Choose 3 hours from the following:

- ENSC 4023 Water Quality
- GEOS 3333 Oceanography
- GEOS 4033 Hydrogeology
- GEOS 4363 Climatology
- GEOS 4473 Applied Climatology

Natural Resources Core:

Environmental Science – Choose 6-9 hours from the following⁶:

- ASTM 3153 Surveying in Agriculture and Forestry
- CSES 2013 Pest Management
- CSES 355V Soil Profile Description (1 hour)⁴
- CSES 4553 Wetland Soils
- CSES 462V Internship (1-6 hours)
- ENSC 3103 Plants and Environmental Restoration
- ENSC 3263 Soil and Water Conservation
- ENSC 3603 GIS for Environmental Science
- ENSC 4021L Water Quality Lab
- ENSC 4401 Professional Certification Preparation
- GEOS 3043 Sustaining Earth
- GEOS 3543 Geospatial Applications and Information Science

Environmental Studies – Choose 0-3 hours from the following:

- AGEC 3413 Principles of Environmental Economics
- AGEC 3503 Agricultural Law I
- AGEC 3523 Environmental and Natural Resources Law
- ENSC 3933 Environmental Ethics
- SOCI 4603 Environmental Sociology

General Electives: 16-17 hours

Check for completion	Course I. D.:	Course Name:
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

OTHER REQUIREMENTS FOR A B.S.A. DEGREE

120 total semester hours of which:
9 hrs outside the Departmental Alpha Codes within the Bumpers College
36 semester hours in upper division courses
Courses taken within major cannot be taken for duplicate credit
2.00 GPA

- ¹ UNIV 1001 is required for new freshmen or transfer with less than 24 hours
- ² See student degree audit for approved course list
- ³ Higher level MATH is encouraged for students with ACT >26 and considering graduate school
- ⁴ May take twice for two hours total credit.
- ⁵ Courses taken within major cannot be taken for duplicate credit.
- ⁶ One 3-hr study abroad course, either Experiential Learning in Indian Agriculture (Jan) or Sustainability in the Eurozone Agro-Food Chain (May), which are both taken under AFLS 401V/401VH, can be substituted for 3 hours of Natural Resources core