

DEPARTMENT OF CROP, SOIL, AND ENVIRONMENTAL SCIENCES

Major in Environmental Soil and Water Science

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

2026-2027

Name:

I.D. Number:

Advisor:

University Requirements: 1 hour¹

- ☐ UNIV 10051 University Perspectives

Communications: 12 hours

- ☐ ENGL 10103 Composition I
☐ ENGL 10203 Composition II
☐ SPCH 10003 Public Speaking
☐ ACOM 31403 Communicating Agriculture to the Public **OR**
CSES 30203 Crop, Soil and Environmental Sciences Colloquium

US History or Government: 3 hours

- ☐ HIST 20003 **or** HIST 20103 **or** PLSC 20003

Mathematics: 6 hours

- ☐ MATH 11003 College Algebra
☐ MATH 12003 Plane Trigonometry³

Physical and Biological Sciences: 35 hours

- ☐ BIOL 10103 Principles of Biology **AND**
☐ BIOL 10101 Principles of Biology Lab
☐ BIOL 20003 General Microbiology **AND**
☐ BIOL 20001 General Microbiology Lab
☐ BIOL 38773 General Ecology **AND**
☐ BIOL 38771 General Ecology Lab **OR**
ENSC 32203 Ecosystems Assessment **AND**
ENSC 32201 Ecosystems Assessment Lab
☐ CSES 12003 Intro to Plant Sciences
☐ CHEM 14103 University Chemistry I **AND**
☐ CHEM 14101 University Chemistry I Lab
☐ CHEM 14203 University Chemistry II **AND**
☐ CHEM 14201 University Chemistry II Lab
☐ CHEM 26103 Organic Physiological Chemistry **AND**
☐ CHEM 26101 Organic Physiological Chemistry Lab **OR**
CHEM 36053 Organic Chemistry I **AND**
CHEM 36051 Organic Chemistry I Lab
☐ GEOL 11103 Physical Geology **AND**
☐ GEOL 11101 Physical Geology Lab
☐ PHYS 20103 College Physics I **AND**
☐ PHYS 20101 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:
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Social Sciences: 9 hours:²

Check for completion	Course I. D.:	Course Name:
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ESWS Major Core: 32-33 hours⁵

Environmental Science Core (17 hours):

- ☐ CSES 22003 Soil Science **AND**
☐ CSES 22001 Soil Science Lab
☐ ENSC 10003 Environmental Science **AND**
☐ ENSC 10001 Environmental Science Lab
☐ ASTM 29003 AHES Applications of Microcomputers
☐ ENSC 30003 Introduction to Water Science
☐ MATH 21003 Principles of Statistics

Soil Science core (3-4 hours):

Select one from the following:

- ☐ CSES 32104 Soil Resources and Nutrient Cycles
☐ CSES 42204 Soil Fertility
☐ CSES 42503 Soil Classification and Genesis
☐ CSES 45503 Wetland Soils
☐ ENSC 32603 Soil & Water Conservation
☐ ENSC 42603 Environmental Soil Science

Water Science core (3 hours):

Select one from the following:

- ☐ ENSC 40203 Water Quality
☐ GEOS 33303 Oceanography
☐ GEOS 40303 Hydrogeology
☐ GEOS 43603 Climatology
☐ GEOS 44703 Applied Climatology

Natural Resources Core:

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

- ☐ ASTM 31503 Surveying in Agriculture and Forestry
☐ CSES 20103 Pest Management
☐ CSES 35501 Soil Profile Description⁴
☐ CSES 45503 Wetland Soils
☐ CSES 4620V Internship (1-6 hours)
☐ ENSC 31003 Plants and Environmental Restoration
☐ ENSC 32603 Soil and Water Conservation
☐ ENSC 36003 GIS for Environmental Science
☐ ENSC 44001 Professional Certification Preparation
☐ GEOS 30403 Sustaining Earth
☐ GEOS 35403 Geospatial Applications and Information Science

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

- ☐ AGECE 34103 Principles of Environmental Economics
☐ AGECE 35003 Agricultural Law I
☐ AGECE 35203 Environmental and Natural Resources Law
☐ ENSC 39303 Environmental Ethics
☐ SOCI 46003 Environmental Sociology

General Electives: 16-17 hours

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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

40 semester hours in upper division courses

Courses taken within major cannot be taken for duplicate credit

2.00 GPA

¹ UNIV 10051 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 4010V/401HV, can be substituted for 3 hours of Natural Resources core