

ENVIRONMENTAL SOIL SCIENCE

2023/2024 Four-Year Plan

This document is for planning purposes only. For official degree information, refer to Degree Audit and speak with your advisor.

YEAR 1 • FALL	PLSC 102 or FOR 221 (F) The Science of Plants in Agriculture or Principles of Ecology	3	YEAR 1 • SPRING	MATH 160 or 170 Math Core (Test Scores/MATH 143)	4
	ELECTIVE General Education	6		ELECTIVE General Education	2
	ENGL 101 Introduction to College Writing (Test Scores, ENGL 109)	3		CHEM 111/111L Principles of Chemistry I (Test Scores/CHEM 101/MATH 143)	4
	MATH 143 Pre-Calculus (Test Scores/MATH 108)	3		ENGL 102 College Writing & Rhetoric (Test Scores/ENGL 101)	3
	TOTAL CREDITS	15		ELECTIVE General Education	3
			TOTAL CREDITS	16	
YEAR 2 • FALL	CHEM 112/112L Principles of Chemistry II (CHEM 111)	5	YEAR 2 • SPRING	PHYS 112/112L General Physics II (PHYS 111)	4
	GEOL 385 GIS Primer	3		CHEM 275 or 277 Carbon Compounds or Organic Chemistry (CHEM 111 or 112)	3
	PHYS 111/111L General Physics I (MATH 143)	4		BIOL 115/115L Cells & Evolution of Life (CHEM 101 or 111)	4
	GEOL 111/111L Physical Geology for Science Majors	4		SOIL 205/206 The Soil Ecosystem (CHEM 111)	4
	TOTAL CREDITS	16		TOTAL CREDITS	15
YEAR 3 • FALL	ASM 315 (F, Odd Years) Irrigation Systems & Water Management (SOIL 205, MATH CORE)	3	YEAR 3 • SPRING	ELECTIVE Soil	3
	EPPN 154/155 Microbiology & the World Around Us (BIOL 115)	4		SOIL 438 (S) Pesticides in the Environment	3
	SOIL 415 (F, Odd Years) Soil & Environmental Physics	3		ELECTIVE General Education	6
	ELECTIVE General Education	3		SOIL 422 (S, Even Years) Environmental Soil Chemistry	3
	ENGL 313 or 317 Business or Technical Writing (ENGL 102; Sophomore or Junior)	3		TOTAL CREDITS	13
TOTAL CREDITS	16				
YEAR 4 • FALL	STAT 251 Statistical Methods (MATH 108, 143, 160 or 170)	3	YEAR 4 • SPRING	SOIL 400 (S) Seminar	1
	SOIL 454 (F) Pedology	3		SOIL 425 (S, Odd Years) Microbial Ecology (BIOL 250)	3
	ELECTIVE Soil	3		SOIL 446 (S) Soil Fertility	3
	AGED 406 (F) or SOC 350 Exploring International Ag (Ur/Sr; AGED 180, ASM 112 or SOIL 205) or Food, Culture & Society (SOC 101)	6		ELECTIVE Soil	3
	TOTAL CREDITS	15		SOIL 438 Pesticides in the Environment	3
		TOTAL CREDITS	14		

COURSE # Course Name (Prerequisites, Co-Requisites)

F = FALL, S = SPRING



ENVIRONMENTAL **SOIL** SCIENCE

Gain the knowledge required to manage crop, forest, rangeland and urban soils for long-term health and sustainability. Explore the fields of soil chemistry, soil physics, microbial ecology, bioremediation, soil genesis and soil fertility/plant nutrition. Gain hands-on experience working in laboratories, greenhouses and on research farms.

Career **Options**

- Soil and Plant Scientist
- Soil and Water Conservationist
- Environmental Scientist
- Natural Resources Manager
- Water Resource Specialist
- Environmental Compliance Inspector



Fast **Facts**

- Home to the largest collection of soil monoliths in the Western U.S.
- Hands-on experience at on-campus plant science farms and computer-controlled greenhouses.
- Complete an independent study.
- Get involved with the Plant and Soil Science Club, Soil Stewards or the U of I Soil Judging team.
- Conduct an undergraduate research project.