

SOIL SCIENCE, PHD

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (<https://guide.wisc.edu/graduate/#requirements>) and policies (<https://guide.wisc.edu/graduate/#policies>), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW-Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement Detail

Minimum Credit Requirement	51 credits
Minimum Residence Credit Requirement	32 credits
Minimum Graduate Coursework Requirement	26 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	Required courses in soil science must be completed with a grade of B or better (BC and C may not be offset by AB and A). For all other courses, the requirement is

an average record of B or better in all work taken as a graduate student.

Assessments and Examinations Candidates must complete the PhD prospectus, which consists of the prospectus seminar, the written prospectus, and prospectus examination.

Candidates are required to take a preliminary examination.

Candidates for the PhD degree are subject to a final oral examination on their dissertation and the general fields of the major and minor studies. Candidates must present an open seminar on their PhD research findings, followed by oral defense of the dissertation in front of the doctoral committee.

Deposit of the doctoral dissertation is required.

Language Requirements No language requirements.

Graduate School Breadth Requirement All doctoral students are required to complete a doctoral minor or graduate/professional certificate. Refer to the Graduate School: Breadth Requirement in Doctoral Training policy: <https://policy.wisc.edu/library/UW-1200> (<https://policy.wisc.edu/library/UW-1200/>).

Breadth requirement fulfillment must be approved by the applicable doctoral minor or graduate/professional certificate department or by the Department of Soil and Environmental Sciences Certification Committee no later than the end of the second semester of PhD graduate work (not including summer sessions). A copy of the completed breadth agreement form is needed to obtain the warrant for the preliminary exam.

REQUIRED COURSES

Code	Title	Credits
Core Coursework		
SOIL SCI 301	General Soil Science	3
SOIL SCI 302	Meet Your Soil: Soil Analysis and Interpretation Laboratory	1
Environmental Soil Science		
SOIL SCI/ ENVR ST 324	Soils and Environmental Quality	3
or SOIL SCI 327	Environmental Monitoring and Soil Characterization	
Soil Physics		
PLANTSCI/ ATM OCN 532	Environmental Biophysics	3
or SOIL SCI 622	Soil Physics	
Soil Chemistry¹		
SOIL SCI 621	Soil and Environmental Chemistry	3
or SOIL SCI/ CIV ENGR/ M&ENVTOX 631	Toxicants in the Environment: Sources, Distribution, Fate, & Effects	
or SOIL SCI/ F&W ECOL 451	Environmental Biogeochemistry	
Soil Biology¹		

SOIL SCI/ MICROBIO 523	Soil Microbiology and Biochemistry	3
or SOIL SCI/ F&W ECOL 451	Environmental Biogeochemistry	
Other Required Coursework		
SOIL SCI 728	Graduate Seminar ²	2
SOIL SCI 799	Practicum in Soil Science Teaching ³	1-3
Research Credits ⁴		
Students complete 17 credits of research.		17
SOIL SCI 990	Research	
Elective Coursework		
A minimum of 6 credits of non-research courses approved by the student's examination committee and/or advisor.		6
Breadth		9
Total Credits		51

¹ Students who take SOIL SCI/F&W ECOL 451 Environmental Biogeochemistry may count it as either Soil Chemistry or Soil Biology credits, but it cannot count towards both categories.

² All PhD candidates must present at least two seminars in SOIL SCI 728. One of the seminars must be on the student's prospectus.

³ All candidates pursuing a Soil Science PhD shall complete a minimum of 1 credit of SOIL SCI 799. A written plan for satisfying this requirement shall be prepared by the student in conjunction with the advisor and approved by the Certification Committee. The type and level of effort required to earn one or more degree credits in SOIL SCI 799 shall be in accordance with the guidelines and standards set forth by the CALS Curriculum Committee and approved by the UW Divisional Committees in the Spring Semester 1981.

⁴ PhD candidates are required to enroll in at least 1 credit of SOIL SCI 990 every semester.