

Soil Science (PhD)

Degree Requirements

Code	Title	Hours
Required Courses		18
SSC 511	Soil Physics	
SSC 521	Soil Chemistry	
SSC 532	Soil Microbiology	
SSC 541	Soil Fertility	
SSC 551	Soil Morphology, Genesis and Classification	
SSC 801	Seminar ¹	
SSC 885	Doctoral Supervised Teaching ²	
Elective Courses		
"Elective Courses" will be determined in conjunction with the academic committee		
Total Hours		72

¹ PhD students must take at least one credit of SSC 801 Seminar.

² PhD students are required to serve as a TA in two sections of the appropriate assigned courses for a total of 2 credits.

Additional Requirements

Successful completion of the PhD in Soil Science requires completion of :

- At least 72 semester credit hours beyond the bachelor's degree
 - If the student has an MS degree from another institution, a maximum of 18 hours of relevant graduate credit from that degree may be applied toward this minimum, upon the recommendation of the student's Graduate Advisory Committee, and the minimum required will be 54 semester credit hours
 - If a student completes an MS degree at NC State and continues for a doctoral degree without a break in time, up to 36 relevant credit hours taken while in master's status may be used to meet minimum requirements for the doctoral degree. If there is a break in time between completing the master's (at NC State) and beginning the doctorate (at NC State), the allowance is limited to 18 hours. Either allowance may include those 400-level courses taken as an approved part of the MS degree
- The preliminary written and oral examinations
- An original research program
- A doctoral dissertation
- The final oral examination
- A non-credit exit seminar

Faculty

Professors

Aziz Amoozegar

Area of Research: Environmental Soil Physics

David A. Crouse

Area of Research: Soil Science Education

Owen W. Duckworth

Area of Research: Soil Biogeochemistry

Alan J. Franzluebbers

Area of Research: Soil Ecology and Management

John L. Havlin

Area of Research: Soil Fertility

Joshua L. Heitman

Area of Research: Soil Physics & Hydrology

Michael D. Mullen

Area of Research: Soil Biology & Soil Science Education

Deanna L. Osmond

Area of Research: Soil Fertility & Watershed Management

Wei Shi

Area of Research: Soil Microbiology & Ecology

Michael J. Vepraskas

Area of Research: Wetland Soils & Pedology

Associate Professors

Luciano C. Gatiboni

Area of Research: Soil Fertility & Nutrient Management

Alexandria K. Graves

Area of Research: Soil Microbiology

Assistant Professors

Kevin Garcia

Area of Research: Plant-Microbe Interactions & Nutrient Transport

Amy M. Johnson

Area of Research: Soil Science

Stephanie B. Kulesza

Area of Research: Nutrient Management and Animal Waste

Hui Li

Area of Research: Environmental Soil Chemistry

Ekrem Ozlu

Area of Research: Soil Management

Matthew C. Ricker

Area of Research: Pedology

Alex L. Woodley

Area of Research: Sustainable Agricultural Systems

Practice/Research/Teaching Professor

Robert E. Austin

Area of Research: Geospatial Information and Analytics in Soils, Agriculture and Environmental Science