Soil Science (MR)

Degree Requirements

Code	Title	Hours
Required Courses [1]		**4**
SSC 601	Seminar [2]	
SSC 675	Project in Soil Science [3]	
Core Courses		**13-14**
Students must complete at least four of the following five courses:		
SSC 511	Soil Physics	
SSC 521	Soil Chemistry	
SSC 532	Soil Microbiology	
SSC 541	Soil Fertility	
SSC 551	Soil Morphology, Genesis and Classification	
Additional Courses [4, 5]		**12-13**
Additional Courses are determined in conjunction with the academic advisor.		
Total Hours		**30**

1. All Master of Soil Science Students who have had no soil science coursework may be required to take SSC 200 Soil Science. This requirement will be determined when a student is admitted to the degree. This is available online. It does not count towards the degree. Alternatively, a student may take a basic soils course at another university and provide documentation of completion.
2. Students may apply no more than 2 credits of SSC 601 Seminar to their degree requirements.
3. Students must complete 3 credits of SSC 675 (https://webappprd.acs.ncsu.edu/php/coursecat/directory.php) and may not use more than 6 credits for their degree program.
4. Distance education students should consult with their faculty advisors for a listing of courses offered online.
5. Students with no formal soil science field experience may be required to enroll in at least one field experience course. This will be determined by the advisor and Director of Graduate Programs.

SSC 675 Project in Soil Science

All students will complete a project in coordination with their advisor to satisfy the SSC 675 Project in Soil Science requirement. Students will typically receive 3 credits for this project, but they may enroll in up to 6 credits for more extensive projects. Enrollment in more than 3 credits requires approval from the Director of Graduate Programs.

Prior to enrolling in SSC 675, the student must define the project and file a Project Agreement form approved by the advisor. The project is only considered complete when a work product is submitted to the advisor and is considered suitable for credit.

Possible activities that satisfy the requirement:

- A comprehensive literature review on a topic of interest that is of publishable quality.
- A work product that addresses a special project with an employer.
- An extension bulletin or fact sheet.
- A lab or field research project with a final paper.
- Other work products as agreed upon.

Additional Requirements

- The degree program must include at least 21 credit hours of letter-graded courses. These must be NC State or inter-institutional courses.
- No more than six (6) credit hours of 400-level courses from outside of SSC may be counted toward the 30-hour requirement.
- A maximum of 6 credits in SSC 675 Project in Soil Science is allowed. Students may not take 6 credits of SSC 675 and also earn credit for other individual project based work under other course numbers (e.g., SSC 590, SSC 620). This does not exclude a student from taking a course organized under SSC 620.
- Credit hours for the following courses may NOT be used to satisfy the 30-credit hour requirement:
  - SSC 688/689 Non-Thesis Master’s Continuous Registration
  - SSC 690 Non-Thesis Master's Examination
  - SSC 693 Master's Supervised Research
  - SSC 695 Master's Thesis Research
  - SSC 696 Summer Thesis Research
  - SSC 699 Master's Thesis Preparation
- There is no requirement for a faculty graduate committee or a research thesis.
- Students may not officially pursue a minor in another discipline. However, graduate certificates may be earned during the degree and certificate courses can serve as electives (certificates are at least 12 credits).

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

Reid Longley

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