Soil Science (Certificate)

To see more about what you will learn in this program, visit the Learning Outcomes website (https://apps.orip.ncsu.edu/pgas/).

The Undergraduate Certificate in Soil Science enables students to obtain the course credit hours in soil science necessary for advancement in soil related careers. To become a Soil Scientist in the U.S. Federal Government, the Office of Personnel Management requires 15 credit hours in subjects such as soil genesis, pedology, soil chemistry, soil physics, and soil fertility. In states like North Carolina and others with a soil scientist licensing program, 15 credit hours of soil science related coursework is required to qualify for the licensing exam. Nationally, to become a Professional Soil Scientist certified by the Soil Science Society of America, individuals must have completed 15 course credit hours in soil science or a related area. Those who complete this program will meet the soil science coursework requirement for all three career advancement opportunities.

You can learn more about North Carolina’s licensed soil scientist program on their website (https://ncblss.wordpress.ncsu.edu/). To learn more about the national certification program, visit their website (http://soils.org/certifications/become-certified/).

This program may be completed totally online. For more information, visit our Distance Education (https://online-distance.ncsu.edu/program/university-certificate-in-soil-science/) website.

Program Coordinator
Dr. David Crouse
Director of Undergraduate Programs and Coordinator of Distance Education Programs
Department of Crop and Soil Sciences

Admissions Requirements
This program is open to current undergraduate students and those outside of North Carolina State University pursuing continuing education credits.

Contact Person
Undergraduate Programs Office
Crop & Soil Sciences Department
2234 Williams Hall
Campus Box 7620
919-515-5820
cropsoil-undergraduate-office@ncsu.edu

Academic Structure
Term Effective: 1/2017
Plan Code: 11SSCTU, 32SSCTU
CIP Code: 01.1201
Description: Undergraduate Certificate in Soil Science
Offered via on-campus and Distance Education (https://online-distance.ncsu.edu/program/university-certificate-in-soil-science/) format

Plan Requirements
Prerequisites:

To pursue the certificate, students must have the following training in basic sciences:

- 2 semesters of chemistry
- 1 semester of physics
- 1 semester of biology
- mathematics through algebra and trigonometry

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<td>Soil Science 2</td>
<td>3</td>
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Elective Courses
Select four of the following:

- SSC 341 Soil Fertility and Nutrient Management 2
- or SSC 541 Soil Fertility
- SSC 470/570 Wetland Soils 2
- SSC 532 Soil Microbiology 2
- or SSC 332 Environmental Soil Microbiology
- SSC 421 Role of Soils in Environmental Management
- SSC 440/540 Geographic Information Systems (GIS) in Soil Science and Agriculture 2
- SSC 442 Soil and Environmental Biogeochemistry
- SSC 551 Soil Morphology, Genesis and Classification 2
- or SSC 452 Soil Classification
- SSC 455 Soils, Environmental Quality and Global Challenges
- SSC 511 Soil Physics 2
- or SSC 461 Soil Physical Properties and Plant Growth
- CSSC 495 Special Topics in Crop and Soil Sciences
- SSC 562 Environmental Applications Of Soil Science 2
- SSC 590 Special Problems in Soil Science

Total Hours 15

1 The required courses are available on-campus and via distance education. Prerequisites may be required in some courses. Students should contact instructors before enrolling to discuss eligibility as needed.
Available through Distance Education and on-campus. The 500-level courses are graduate level courses.

A grade of C (2.0) or higher in each course is required.