

# Soil Science

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## Department Information

- **Department Location:**  
Walster Hall
- **Department Phone:**  
701-231-8901
- **Department Web Site:**  
[www.ndsu.edu/soils/](http://www.ndsu.edu/soils/)
- **Credential Offered:**  
B.S.
- **Plan Of Study Sample:**  
[bulletin.ndsu.edu/programs-study/undergraduate/soil-science/#planofstudytext](http://bulletin.ndsu.edu/programs-study/undergraduate/soil-science/#planofstudytext)

## Major Requirements

### Major: Soil Science

Degree Type: B.S.

Minimum Degree Credits to Graduate: 120

### University Degree Requirements

1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
3. Satisfactory completion of the general education requirements as specified by the university.
4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
5. At least 36 credits presented for graduation must be in courses number 300 or higher.
6. Transfer Students: Must earn a minimum of 60 credits from a baccalaureate-degree granting or professional institution.
  - a. Of these 60, at least 36 must be NDSU residence credits as defined in #7.
  - b. Within the 36 resident credits, a minimum of 15 must be in courses numbered 300 or higher and 15 credits in the major field of study.
7. At least 36 credits must be NDSU resident credits. Residence credits include credits registered and paid for at NDSU.

For complete information, please refer to the Degree and Graduation Requirements (<http://bulletin.ndsu.edu/past-bulletin-archive/2019-20/academic-policies/undergraduate-policies/degree-and-graduation>) section of this Bulletin.

### University General Education Requirements

Code	Title	Credits
<b>Communication (C)</b>		<b>12</b>
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing <sup>†</sup>		
<b>Quantitative Reasoning (R) <sup>†</sup></b>		<b>3</b>
<b>Science and Technology (S) <sup>†</sup></b>		<b>10</b>
<b>Humanities and Fine Arts (A) <sup>†</sup></b>		<b>6</b>
<b>Social and Behavioral Sciences (B) <sup>†</sup></b>		<b>6</b>
<b>Wellness (W) <sup>†</sup></b>		<b>2</b>
<b>Cultural Diversity (D) <sup>*†</sup></b>		
<b>Global Perspectives (G) <sup>*†</sup></b>		
Total Credits		39

\* May be satisfied by completing courses in another General Education category.

† General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.

- A list of university approved general education courses and administrative policies are available here (<http://bulletin.ndsu.edu/past-bulletin-archive/2019-20/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).

## Major Requirements

Code	Title	Credits
<b>Required Courses for Soil Science</b>		
NRM 150	Natural Resource Management Orientation	1
PLSC 110	World Food Crops (May satisfy general education category S and G)	3
PLSC 225 or RNG 136	Principles of Crop Production Introduction to Range Management	3
SOIL 210	Introduction to Soil Science	3
SOIL 217	Introduction to Meteorology & Climatology	3
SOIL 264	Natural Resource Management Systems	3
SOIL 322	Soil Fertility and Fertilizers	3
SOIL 351	Soil Ecology	3
SOIL 410	Soils and Land Use	3
SOIL 444	Soil Genesis and Survey	3
SOIL 454	Wetland Resources Management	3
GEOG 455 or RNG 452	Introduction to Geographic Information Systems Geographic Information Systems in Range Survey	4
SOIL 462	Natural Resource and Rangeland Planning	3
<b>Supporting Courses</b>		
BIOL 150 & 150L	General Biology I and General Biology I Laboratory	4
BIOL 151 & 151L or PHYS 212 & 212L	General Biology II and General Biology II Laboratory College Physics II and College Physics II Laboratory	4
CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory (May satisfy general education category S)	4
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory (May satisfy general education category S)	4
GEOL 105 & 105L	Physical Geology and Physical Geology Lab (May satisfy general education category S)	4
MATH 103	College Algebra	3
MATH 105	Trigonometry	3
PLSC 380	Principles of Plant Physiology	3
PHYS 211 & 211L	College Physics I and College Physics I Laboratory (May satisfy general education category S)	4
STAT 330	Introductory Statistics (May satisfy general education category R)	3
Select one from the following: (May satisfy general education category C)		3
ENGL 321	Writing in the Technical Professions	
ENGL 324	Writing in the Sciences	
ENGL 459	Researching and Writing Grants and Proposal	
Select one of the following:		3-4
BIOC 260	Elements of Biochemistry	
CHEM 240	Survey of Organic Chemistry	
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab	
<b>Agriculture Electives: Select 9 credits of agriculture electives</b>		9
Total Credits		86

<sup>1</sup> AGRI189 is only required for first-time, first-year students—A first-time, first-year student is defined as a student who has not yet completed a college course as a college student. Students that are not first-time, first-year students that either transfer into the university or change their major are not required to take AGRI 189.

## Minor Requirements

### Soil Science Minor

#### Minor Requirements

Required Credits: 18

Code	Title	Credits
<b>Required Courses</b>		
SOIL 210	Introduction to Soil Science	3
SOIL 322	Soil Fertility and Fertilizers	3
SOIL 444	Soil Genesis and Survey	3
<b>Elective Courses</b>		
Select three of the following:		9
SOIL 264	Natural Resource Management Systems	
SOIL 351	Soil Ecology	
SOIL 410	Soils and Land Use	
SOIL 433	Soil Ecohydrology and Physics	
SOIL 447	Microclimatology	
SOIL/NRM/RNG 454	Wetland Resources Management	
SOIL 465	Soil And Plant Analysis	
Total Credits		18

#### Minor Requirements and Notes:

- A minimum of 8 credits must be taken at NDSU.
- Students must earn a minimum 2.00 GPA for the minor requirements.