## Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SSC 601</td>
<td>Seminar</td>
<td>1</td>
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<tr>
<td>SSC 620</td>
<td>Special Problems</td>
<td>2</td>
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<tr>
<td>SSC 511</td>
<td>Soil Physics</td>
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<tr>
<td>SSC 521</td>
<td>Soil Chemistry</td>
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<tr>
<td>SSC 532</td>
<td>Soil Microbiology</td>
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<td>SSC 541</td>
<td>Soil Fertility</td>
<td></td>
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<tr>
<td>SSC 551</td>
<td>Soil Morphology, Genesis and Classification</td>
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### Required Courses
- **5-8**
  - Select four of the following courses:
    - SSC 511 Soil Physics
    - SSC 521 Soil Chemistry
    - SSC 532 Soil Microbiology
    - SSC 541 Soil Fertility
    - SSC 551 Soil Morphology, Genesis and Classification

### Core Courses
- **4-7**

### Undergraduate Courses
- **6**
  - 400-Level undergraduate courses from outside soil science will be determined in conjunction with the academic committee.

### Elective Courses
- **18**
  - "Elective Courses" will be determined in conjunction with the academic committee.

### Total Hours
- **36**

1. Students can take no more than two credits of SSC 601 Seminar total.
2. Students can take four to six credits of SSC 620 Special Problems.
3. Students may have courses waived upon proving competency in the following coursework.
4. Students must take at least 18 hours of letter-graded course work – these must be NC State courses or inter-institutional courses (https://studentservices.ncsu.edu/your-classes/exchange-programs/inter-institutional-program/).

### Additional Requirements

All Masters students must demonstrate competence in four of the five sub-disciplines listed below, and Doctoral students must demonstrate competency in all five.

- Soil Chemistry
- Soil Fertility and Plant Nutrition
- Soil Genesis and Classification
- Soil Microbiology and Biochemistry
- Soil Physics

The required competencies can be achieved by any combination of the following:

1. relevant course work from previous undergraduate and/or graduate degree programs;
2. prior professional experience in the major sub-discipline(s); and
3. graduate courses included in the student’s Plan of Work (POW) for their current degree program.

### Faculty

#### Full Professors
- Aziz Amoozegar
- Stephen W. Broome
- David A. Crouse
- Owen W. Duckworth
- Alan J. Franzlubbers
- John L. Havlin
- Joshua L. Heitman
- Dean L. Hesterberg
- Richard A. McLaughlin
- Michael D. Mullen
- Deanna L. Osmond
- Wei Shi
- Michael J. Vepraskas

#### Associate Professors
- Alexandria K. Graves
- Jeffrey G. White

#### Assistant Professors
- Kevin Garcia
- Terrence G. Gardner
- Luciano C. Gatiboni
- Amy M. Johnson
- Stephanie B. Kulesza
- Matthew C. Ricker
- Alex L. Woodley

#### Emeritus Faculty
- Stanley W. Buol
- Keith Cassel
- Maurice Cook
- Fred Cox
- Carl Crozier
- George Cummings
- J. Wendell Gilliam
Daniel Israel
Joseph Kleiss
David Lindbo
Gordon Miner
George C. Naderman Jr.
Wayne Robarge
Thomas J. Smyth
Richard Volk
Michael Wagger
Arthur Wollum

Practice/Research/Teaching Professors

Robert E. Austin