

# Natural Resources – Soil, Water, and Land Use

Eight Semester Plan for Bachelor of Science degree in Natural Resources  
with a concentration in Soil, Water, and Land Use (11NATRLBS-11NATRLNRW)

Effective: January 2019

This plan outlines an ideal path for degree completion in four years. The plan assumes course availability as published in the NC State University Course Catalog. It does not reflect courses transferred to the university or credits earned through Advanced Placement. Questions related to this pathway can be directed to the [cropsoil-undergraduate-office@ncsu.edu](mailto:cropsoil-undergraduate-office@ncsu.edu)

## FRESHMAN YEAR

FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
ALS 103 Freshman Transitions & Diversity OR ALS 303 Transfer Transitions & Diversity	1	CH 101 Chemistry – A Molecular Science	3
BIO 181 Intro to Biology: Ecol, Evol, and Biodiv.	4	CH 102 General Chemistry Lab	1
ENG 101 Academic Writing and Research	4	MA 231 Calculus for Life & Management Science	3
MA 131 Elements in Calculus	3	AEC 360 Ecology	4
Foundation Elective <sup>1</sup>	3	GEP Humanities Elective <sup>C</sup>	3
CS 290 Professional Development in Plant and Soil Sciences	1	GEP Physical Education/Healthy Living Elective <sup>E</sup>	1
Total:	<b>16</b>	Total:	<b>15</b>

## SOPHOMORE YEAR

FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
ARE 201 Intro to Agricultural and Resource Economics	3	MEA 101 Geology I: Physical	3
COM 110 Public Speaking <u>or</u> COM 112 Interpersonal Communications	3	MEA 110 Geology I: Lab	1
SSC 200 Soil Science	3	PY 131 Conceptual Physics	4
SSC 201 Soil Science Laboratory	1	SSC 341 Soil Fertility & Nutrient Management	3
ST 311 Intro to Statistics	3	Economics, Management and Policy Elective <sup>3</sup>	3
Plant Science Elective <sup>6</sup>	3	GEP Interdisciplinary Perspectives Elective <sup>G</sup>	2
GEP Physical Education/Healthy Living Elective <sup>E</sup>	1		
Total:	<b>17</b>	Total:	<b>16</b>

## JUNIOR YEAR

FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
SSC 342 Soil and Plant Nutrient Analysis	1	NR 300 Natural Resources Measurements	4
SSC 461 Soil Physical Properties & Plant Growth	3	SSC 452 Soil Classification	4
Advanced Chemistry Elective <sup>2</sup>	3 or 4	Geospatial Technologies Elective <sup>4</sup>	3
Land Use Elective <sup>5</sup>	3	Water, Wetlands, and Ecology Elective <sup>7</sup>	3
Economics, Management and Policy Elective <sup>3</sup>	3		
Total:	<b>13 or 14</b>	Total:	<b>14</b>

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**SENIOR YEAR**

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FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
Experiential Learning Elective	3	Free Elective	3-4
ENG 331 Comm for Engineering and Tech <b>or</b>	3	SSC 490 Senior Seminar	1
ENG 332 Comm for Business & Management <b>or</b>			
ENG 333 Comm for Science & Research			
GEP Humanities Elective <sup>C</sup>	3	Land Use Elective <sup>5</sup>	3
GEP Additional Breadth Elective <sup>F</sup>	3	Water, Wetlands, and Ecology Elective <sup>7</sup>	3
GEP Social Sciences Elective <sup>D</sup>	3	Plant Science Elective <sup>6</sup>	3
Total:	<b>15</b>	Total:	<b>13-14</b>

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Minimum Credit Hours Required for Graduation \* : **120**

**Major/Program Footnotes:**

<sup>1</sup> **Foundation Elective:** Select from ES 150, FW 221, or SSC 185.

<sup>2</sup> **Advanced Chemistry Elective:** Select from CH 201 AND CH 202; CH 220 AND CH 222; or SSC 442.

<sup>3</sup> **Economics, Management and Policy Electives:** Select from ARE 215, ARE 306, ARE 309, ARE 312, ARE 332, ARE 336, CS 418, NR 460, PS 201, PS 202, or PS 320.

<sup>4</sup> **Geospatial Technologies Electives:** Select from BAE 325, FOR 353, GIS 280, GIS 512, SSC 440, or SSC 545.

<sup>5</sup> **Land Use Electives:** Select from MEA 300, MEA 481, NR 400, NR 484, NR 510, SSC 410, SSC 421, SSC 427, SSC 455, or SSC 462.

<sup>6</sup> **Plant Science Electives:** Select from CS 213, CS 230, CS 312, FOR 220, FOR 339, FOR 252, PB 200, PB 220, or PB 321.

<sup>7</sup> **Water, Wetlands and Ecology Electives:** Select from AEC 400, AEC 419, AES 323, FOR 260, NR 420, NR 420, SSC 332, or SSC 470.

<sup>8</sup> **Experiential Learning Elective:** Select from CSSC 492 or CSSC 493

**\* General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. **Mathematical Sciences** (6 credit hours – one course with MA or ST prefix)  
*Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **These requirements are met through required courses. Students do not need to take additional math.***
- B. **Natural Sciences** (7 credit hours – include one laboratory course or course with a lab)  
*Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **These requirements are met through required courses. Students do not need to take additional science.***
- C. **Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement.*
- D. **Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **3 hours are met by the ARE 201. 3 hours are met by PS 201 or PS 202, if chosen. 3 hours are met by COM 112, if chosen.***
- E. **Physical Education/Healthy Living** (2 credit hours – at least one 100-level Fitness and Wellness Course)  
*Choose from the University approved GEP Physical Education/Healthy Living course list.*
- F. **Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
X Humanities/Social Sciences/Visual and Performing Arts or \_\_\_\_\_ Mathematical Sciences/Natural Sciences/Engineering
- G. **Interdisciplinary Perspectives** (5-6 credit hours)  
*Choose from the University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement. **3 hours are met by ES 150 or FW 221 or SSC 185 in the Foundation Elective requirement.***
- H. **Introduction to Writing** (4 credit hours satisfied by completing ENG 101 with a C- or better )

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. **U.S. Diversity** (USD)  
*Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement.*
- J. **Global Knowledge** (GK)  
*Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement.*
- K. **Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.