

# MAJOR IN SOIL AND CROP SCIENCES, PLANT BIOTECHNOLOGY, GENETICS, AND BREEDING CONCENTRATION

## Major Completion Map

### Freshman

Semester 1		Critical	Recommended	AUCC	Credits
Select one course from the following:					1
AGRI 192	Orientation to Agricultural Systems				
AGRI 292	Transfer Seminar				
CHEM 111	General Chemistry I (GT-SC2)	X		3A	4
CHEM 112	General Chemistry Lab I (GT-SC1)			3A	1
LIFE 102	Attributes of Living Systems (GT-SC1)	X		3A	4
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	X		1B	1
MATH 125	Numerical Trigonometry (GT-MA1)	X		1B	1
SOCR 100	General Crops				4

**Total Credits** **16**

Semester 2		Critical	Recommended	AUCC	Credits
CHEM 113	General Chemistry II	X			3
CHEM 114	General Chemistry Lab II				1
CO 150	College Composition (GT-CO2)	X		1A	3
LIFE 103	Biology of Organisms-Animals and Plants (GT-SC1)	X		3A	4
MATH 126	Analytic Trigonometry (GT-MA1)			1B	1
MATH 155	Calculus for Biological Scientists I (GT-MA1)			1B	4
AUCC 1B (Quantitative Reasoning) must be completed by the end of Semester 2.		X			

**Total Credits** **16**

### Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
AREC 202	Agricultural and Resource Economics (GT-SS1)			3C	3
CHEM 245	Fundamentals of Organic Chemistry				4
CHEM 246	Fundamentals of Organic Chemistry Laboratory				1
PH 110	Physics of Everyday Phenomena (GT-SC2)			3A	3
SOCR 240	Introductory Soil Science				4
LIFE 102 must be completed by the end of Semester 3.		X			

**Total Credits** **15**

Semester 4		Critical	Recommended	AUCC	Credits
Select one course from the following:					3
AGRI 116/ IE 116	Plants and Civilizations (GT-SS3)			1C	
AGRI 270/ IE 270	World Interdependence-Population and Food (GT-SS3)			1C	
Select one course from the following:					2-3
FSHN 125	Food and Nutrition in Health				
FSHN 150	Survey of Human Nutrition				

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PHIL 110	Logic and Critical Thinking (GT-AH3)			3B	3
SOCR 330	Principles of Genetics				3
SPCM 200	Public Speaking				3
Historical Perspectives ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives</a> )				3D	3
CHEM 245 must be completed by the end of Semester 4.				X	
<b>Total Credits</b>					<b>17</b>
<b>Junior</b>					
<b>Semester 5</b>					
		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
BC 351	Principles of Biochemistry				4
Select two groups from the following:					6
Group A:					
BSPM 302	Applied and General Entomology				
BSPM 303C	Entomology Laboratory: Agricultural				
Group B:					
BSPM 308	Ecology and Management of Weeds				
Group C:					
BSPM 361	Elements of Plant Pathology				
Elective					3
Genetics or Horticulture Electives (See Department List on Concentration Requirements tab)					4
<b>Total Credits</b>					<b>17</b>
<b>Semester 6</b>					
		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
BZ 310	Cell Biology				4
JTC 300	Strategic Writing and Communication (GT-CO3)			2	3
Select one course from the following:					3
STAT 301	Introduction to Applied Statistical Methods				
STAT 307	Introduction to Biostatistics				
Genetics or Horticulture Electives (See Department List on Concentration Requirements tab)					4
SOCR 330 must be completed by the end of Semester 6.				X	
<b>Total Credits</b>					<b>14</b>
<b>Senior</b>					
<b>Semester 7</b>					
		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
Select one course from the following:					3
SOCR 430				4A,4B,4C	
SOCR 460/ HORT 460	Plant Breeding and Biotechnology			4A,4B,4C	
SOCR 492	Preparing for Impact–Your Career Journey	X		4A	1
Arts and Humanities ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities</a> )				3B	3
Soil and Crop Electives (See Department List on Concentration Requirements tab)					5
<b>Total Credits</b>					<b>12</b>
<b>Semester 8</b>					
		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
BZ 440	Plant Physiology	X			3
SOCR 486	Practicum	X		4C	1
Soil and Crop Elective (See Department List on Concentration Requirements tab)					3
Electives					6

The benchmark courses for the 8th semester are the remaining courses in the entire program of study. X

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<b>Total Credits</b>	<b>13</b>
<b>Program Total Credits:</b>	<b>120</b>