MAJOR IN SOIL AND CROP SCIENCES, PLANT BIOTECHNOLOGY CONCENTRATION

Major Completion Map

Freshman

Semester 1		**Critical**	**Recommended**	**AUCC**	**Credits**
AGRI 100	Contemporary Agricultural Systems				1
CHEM 111	General Chemistry I (GT-SC2)	X		3A	4
CHEM 112	General Chemistry Lab I (GT-SC1)	X		3A	1
LIFE 102	Attributes of Living Systems (GT-SC1)	X		3A	4
MATH 117	College Algebra in Context I (GT-MA1)			1B	1
MATH 118	College Algebra in Context II (GT-MA1)			1B	1
SOCR 100	General Crops	X			4
	Total Credits				**16**

Semester 2		**Critical**	**Recommended**	**AUCC**	**Credits**
BZ 120	Principles of Plant Biology (GT-SC1)	X		3A	4
CHEM 113	General Chemistry II	X			3
CHEM 114	General Chemistry Lab II	X			1
CO 150	College Composition (GT-CO2)	X		1A	3
LIFE 103	Biology of Organisms-Animals and Plants (GT-SC1)	X		3A	4
MATH 124	Logarithmic and Exponential Functions (GT-MA1)			1B	1
SOCR 193	Pathways to Success	X			1
AUCC 1B (Quantitative Reasoning) must be completed by the end of Semester 2.		X			
	Total Credits				**17**

Sophomore

Semester 3		**Critical**	**Recommended**	**AUCC**	**Credits**
CHEM 245	Fundamentals of Organic Chemistry	X			4
CHEM 246	Fundamentals of Organic Chemistry Laboratory	X			1
MATH 125	Numerical Trigonometry (GT-MA1)			1B	1
SOCR 171/ HORT 171	Environmental Issues in Agriculture (GT-SS3)	X		1C	3
SOCR 221	Cropping Systems Field Experience	X			1
SOCR 240	Introductory Soil Science	X			4
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
LIFE 102 must be completed by the end of Semester 3.		X			
	Total Credits				**17**

Semester 4		**Critical**	**Recommended**	**AUCC**	**Credits**
AREC 202	Agricultural and Resource Economics (GT-SS1)	X		3C	3
SOCR 210	Microbiome Roles in a Sustainable Earth (GT-SC2)	X		3A	3
Select one course from the following:		X			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:		X			2-3
FSHN 125	Food and Nutrition in Health				
FSHN 150	Survey of Human Nutrition				
Advanced Writing (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)			X	2	3
CHEM 245 must be completed by the end of Semester 4.		X			
	Total Credits				**14-15**
Junior					
Semester 5		**Critical**	**Recommended**	**AUCC**	**Credits**
BC 351	Principles of Biochemistry	X			4
Select two groups from the following:		X			6-7
Group A:					
BSPM 302	Applied and General Entomology				
BSPM 303A or 303B	Entomology Laboratory: General Entomology Laboratory: Horticultural				
Group B:					
BSPM 308	Ecology and Management of Weeds				
Group C:					
BSPM 361	Elements of Plant Pathology				
Upper-Division Elective			X		3
	Total Credits				**13-14**
Semester 6		**Critical**	**Recommended**	**AUCC**	**Credits**
AGED 210	History of Agriculture in the United States			3D	3
BZ 310	Cell Biology	X			4
SOCR 330	Principles of Genetics	X			3
Select one course from the following:		X			3-4
BSPM 450	Molecular Plant-Microbe Interaction				
BZ 331	Developmental Plant Anatomy				
ESS 405/ SOCR 405	Global Agriculture and Environmental Change				
HORT 476	Environmental Plant Stress Physiology				
Select one course from the following:		X			3
STAT 301	Introduction to Applied Statistical Methods				
STAT 307	Introduction to Biostatistics				
SOCR 330 must be completed by the end of Semester 6.		X			
	Total Credits				**16-17**
Senior					
Semester 7		**Critical**	**Recommended**	**AUCC**	**Credits**
SOCR 335	Applied Plant Genetics	X			3
SOCR 492	Preparing for Impact--Your Career Journey	X		4A,4C	1
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
Upper-Division Electives			X		5
	Total Credits				**12**
Semester 8		**Critical**	**Recommended**	**AUCC**	**Credits**
BZ 360	Bioinformatics and Genomics	X			4
BZ 440	Plant Physiology	X			3
BZ 441	Plant Physiology Laboratory	X			2
SOCR 460/ HORT 460	Plant Breeding and Biotechnology	X		4A,4B,4C	3
SOCR 486	Practicum	X		4C	1
Upper-Division Electives			X		0-3

The benchmark courses for the 8th semester are the remaining courses in the entire program of study.	X	
	Total Credits	**13-16**
	Program Total Credits:	**120**