

MAJOR IN WATERSHED SCIENCE AND SUSTAINABILITY, WATERSHED SCIENCE CONCENTRATION

courses (MATH 117, MATH 118, MATH 124, MATH 125, MATH 126) prior to the courses listed in this plan.

Major Completion Map

Distinctive Requirements for Degree Program: This program assumes that students will either test out of or take the prerequisite Mathematics

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)	X		1A	3
ESS 120	Intro to Ecosystem and Watershed Sciences	X			1
ESS 129	Information Management for Sustainability	X			1
WR 204/GR 204	Sustainable Watersheds (GT-SC2)	X		3A	3
Select one group from the following:		X			5
Group A					
CHEM 107	Fundamentals of Chemistry (GT-SC2)			3A	
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)			3A	
Group B					
CHEM 111	General Chemistry I (GT-SC2)			3A	
CHEM 112	General Chemistry Lab I (GT-SC1)			3A	
Total Credits					13

Semester 2		Critical	Recommended	AUCC	Credits
STAT 158	Introduction to R Programming	X			1
Select one course from the following:		X			3-4
ESS 210/ GR 210	Physical Geography				
GEOL 110	Introduction to Geology-Parks and Monuments (GT-SC2)			3A	
GEOL 120	Geology and Society (GT-SC2)			3A	
GEOL 122	Geoscience—Climate and Environmental Change (GT-SC2)			3A	
GEOL 124	Earth Resources and Sustainability (GT-SC2)			3A	
GEOL 150	Dynamic Earth (GT-SC2)			3A	
Select 4 credits from the following:		X			4
BZ 120	Principles of Plant Biology (GT-SC1)			3A	
BZ 110 & BZ 111	Principles of Animal Biology (GT-SC2)			3A	
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)		X		1C	3
Social and Behavioral Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)			X	3C	3
CO 150 requirement must be completed by the end of Semester 2.		X			
Total Credits					14-15

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
MATH 155 or 160	Calculus for Biological Scientists I (GT-MA1) Calculus for Physical Scientists I (GT-MA1)	X		1B	4
PH 121 or 141	General Physics I (GT-SC1) Physics for Scientists and Engineers I (GT-SC1)			3A	5
SOCR 240	Introductory Soil Science				4

Arts and Humanities (<http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities>) X 3B 3

Total Credits					16
Semester 4		Critical	Recommended	AUCC	Credits
LIFE 320	Ecology				3
MATH 161 or 255	Calculus for Physical Scientists II (GT-MA1) Calculus for Biological Scientists II	X		1B	4
PH 122 or 142	General Physics II (GT-SC1) Physics for Scientists and Engineers II (GT-SC1)	X		3A	5
STAT 301 or 315	Introduction to Applied Statistical Methods Intro to Theory and Practice of Statistics	X			3
WR 204/GR 204 must be completed by the end of Semester 4.		X			

Total Credits					15
Semester 5		Critical	Recommended	AUCC	Credits
NR 220	Natural Resource Ecology and Measurements	X			5

Total Credits					5
<i>Junior</i>					
Semester 6		Critical	Recommended	AUCC	Credits
NR 319	Introduction to Geospatial Science				4
WR 416	Land Use Hydrology	X		4B	3
WR 474	Snow Hydrology	X			3
WR 486	Watershed Field Practicum	X			2
Electives			X		3

Total Credits					15
Semester 7		Critical	Recommended	AUCC	Credits
AREC 342	Water Law, Policy, and Institutions	X			3
WR 418	Land Use and Water Quality	X			3
Select one course from the following:		X			3
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)			2	
JTC 300	Strategic Writing and Communication (GT-CO3)			2	
LB 300	Specialized Professional Writing			2	
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
Electives			X		3

Total Credits					15
<i>Senior</i>					
Semester 8		Critical	Recommended	AUCC	Credits
WR 417	Watershed Measurements	X			3
Select one from the following:		X			4
GEOL 452	Hydrogeology				
SOCR 470 & SOCR 471	Soil Physics				
Select one course from the following:		X			3
BZ 471	Stream Biology and Ecology				
ESS 474	Limnology				
Watershed Science Elective (See list on requirements tab.)			X		3

Total Credits					13
Semester 9		Critical	Recommended	AUCC	Credits
WR 440	Watershed Problem Analysis	X		4A,4B,4C	3
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)		X		3D	3
Watershed Science Elective (See list on requirements tab.)		X			3
Electives		X			4-5

The benchmark courses for the 9th semester are the remaining courses in the entire program of study. X

Total Credits	13-14
Program Total Credits:	120