

MAJOR IN WATERSHED SCIENCE AND SUSTAINABILITY, WATERSHED DATA 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
CHEM 107 or 111	Fundamentals of Chemistry (GT-SC2) General Chemistry I (GT-SC2)	X		3A	4
CO 150	College Composition (GT-CO2)	X		1A	3
MATH 155 or 160	Calculus for Biological Scientists I (GT-MA1) Calculus for Physical Scientists I (GT-MA1)	X		1B	4
WR 204/GR 204	Sustainable Watersheds	X		3A	3
Total Credits					14

Semester 2		Critical	Recommended	AUCC	Credits
CS 152	Python for STEM				2
STAT 158	Introduction to R Programming	X			1
Select 4 credits from the following:		X			4
BZ 110 & BZ 111	Principles of Animal Biology (GT-SC2)			3A	
BZ 120	Principles of Plant Biology (GT-SC1)			3A	
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	
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)			X	1C	3
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
Total Credits					16-17

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
CS 220	Discrete Structures				4
PH 121 or 141	General Physics I (GT-SC1) Physics for Scientists and Engineers I (GT-SC1)	X		3A	5
STAT 301 or 315	Introduction to Applied Statistical Methods Intro to Theory and Practice of Statistics	X			3
Electives			X		3
Total Credits					15

Semester 4		Critical	Recommended	AUCC	Credits
DSCI 369	Linear Algebra for Data Science	X		3C	4
NR 319	Introduction to Geospatial Science				4

SOCR 240	Introductory Soil Science	X			4
Social and Behavioral Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)			X	3C	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
STAT 341	Statistical Data Analysis I	X			3
WR 416	Land Use Hydrology	X		4B	3
WR 474	Snow Hydrology	X			3
WR 486	Watershed Field Practicum	X			2
Select one course from the following:		X			3
CO 301B	Writing in the Disciplines: Sciences (GT-C03)			2	
JTC 300	Strategic Writing and Communication (GT-C03)			2	
LB 300	Specialized Professional Writing			2	
Total Credits					14
Semester 7		Critical	Recommended	AUCC	Credits
AREC 342	Water Law, Policy, and Institutions	X			3
DSCI 335	Inferential Reasoning in Data Analysis	X			3
WR 418	Land Use and Water Quality	X			3
Watershed Science Department List (see list on Concentration Requirements tab)			X		3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			X		3
Total Credits					15
<i>Senior</i>					
Semester 8		Critical	Recommended	AUCC	Credits
WR 417	Watershed Measurements	X			3
Watershed Science Department List (see list on Concentration Requirements tab)			X		6
Electives					4-5
Total Credits					13-14
Semester 9		Critical	Recommended	AUCC	Credits
WR 440	Watershed Problem Analysis	X		4A,4B,4C	3
Watershed Science Department List (see list on Concentration Requirements tab)					3
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
Electives			X		3
The benchmark courses for the 9th semester are the remaining courses in the entire program of study.		X			
Total Credits					12
Program Total Credits:					120