

# Agroecology Option

## Land Resources and Environmental Sciences

Freshman Year	Credits		
	Fall	Spring	Summer
ENSC 110 - Land Resources and Environmental Sciences	3		
BIOB 170IN - Principles of Biological Diversity	4		
M 121Q - College Algebra	3		
WRIT 101W - College Writing I	3		
BIOB 110CS - Plant Science		3	
CHMY 141 - College Chemistry I & CHMY 142 - College Chemistry I Lab		4	
SFBS 146 - Introduction to Sustainable Food and Bioenergy Systems		3	
ECNS 101IS - Economic Way of Thinking		3	
Univ. Seminar (US Core)		3	
Year Total:	13	16	

Sophomore Year	Credits		
	Fall	Spring	Summer
BIOB 160 - Principles of Living Systems	4		
CHMY 143 - College Chemistry II & CHMY 144 - College Chemistry II Lab	4		
ENSC 245IN - Soils	3		
Take one of the following:	3		
STAT 216Q - Introduction to Statistics			
BIOB 318 - Biometry			
GPHY 284 - Intro to GIS Science & Cartog		3	
Take one of the following:		4-5	
CHMY 123 - Introduction to Organic Chemistry and Biochemistry			
& CHMY 124 - Introduction to Organic and Biochemistry Lab			
CHMY 211 - Elements of Organic Chemistry & CHMY 212 - Elements of Organic Chemistry Lab			
Take one of the following:		3	
ENSC 210 - Role of Plants in the Environment			
ECHM 205CS - Energy and Sustainability			
ANSC 222 - Livestock in Sustain Systems			
Univ. Core		3	
Take one of the following:			3
SFBS 298 - Internship			
SFBS 296 - Practicum: Towne's Harvest			
Year Total:	14	13-14	3

Junior Year	Credits		
	Fall	Spring	Summer
ENSC 353 - Environmental Biogeochemistry	3		
Take one of the following:	3		
NRSM 240 - Natural Resource Ecology			
BIOE 370 - General Ecology			
NUTR 221CS - Basic Human Nutrition	3		
Univ. Core	6		
NUTR 226 - Food Fundamentals		3	
AGSC 341 - Field Crop Production		3	
SFBS 466 - Food System Resilience		3	
Directed Electives		6-7	
Year Total:	15	15-16	

Senior Year	Credits		
	Fall	Spring	Summer
SFBS 327 - Ethnobotany	3		
Take one of the following:	3		
SFBS 429 - Small Business and Entrepreneurship in Food and Health			
BIOO 433 - Plant Physiology (offered Spring)			
NUTR 351 - Nutrition and Society			
Take two of the following:	6		
AGSC 401 - Integrated Pest Management			
ENSC 443 - Weed Ecology and Management			
AGSC 428 - Cropping Systems and Sustainable Agriculture (offered Spring)			
BIOM 421 - Concepts of Plant Pathology (offered Spring)			
SFBS 499 - Senior Thesis/Capstone	3		
SFBS 451R - Sustainable Food Systems		3	
Take one of the following:		3	
BIOE 455 - Plant Ecology			
BIOM 452 - Soil & Environmental Microbiology			
ENSC 468 - Ecosystem Biogeochem and Global Change			
SFBS 498 - Internship		3	
Directed Electives		6	
Year Total:	15	15	

**Total Program Credits:** 120

## Directed Electives

**Each student shall work closely with their faculty advisor to plan an integrated set of directed elective courses appropriate to their academic, professional and personal goals. Courses not on this list may be used IF considered appropriate to the student's goals AND approved by the faculty advisor as a curricular exception.**

**Take at least 12-13 credits of the following:**

AGBE 337	Agricultural Law	3
----------	------------------	---

AGED 482	Non-Formal Teaching Methods in Agriculture	3
AGSC 242	Crop Identification	1
AGSC 342	Forages	3
ANSC 222	Livestock in Sustain Systems (if not taken above)	3
BIOB 375	General Genetics	3
BIOE 422	Insect Ecology	3
BIOE 375	Ecological Responses to Climate Change	3
BIOM 360	General Microbiology	5
BMGT 410	Sustainable Business Practices	3
BMKT 325	Principles of Marketing	3
ECNS 132	Econ & the Environment	3
ECNS 202	Principles of Macroeconomics	3
ENSC 407	Environmental Risk Assessment	3
ENSC 410R	Biodiversity Survey and Monitoring Methods	3
GPHY 357	GPS Fund/App in Mapping	3
GPHY 384	Adv GIS and Spatial Analysis	3
GPHY 484R	Applied GIS & Spatial Analysis	3
HORT 245	Plant Propagation	3
HORT 310	Topics in Horticulture	3
HORT 337	Vegetable Production	3
HORT 343	Comm Plant Production	3
HSTA 409	Food in America	3
HSTR 416	Global History of Food	3
LS 411	Sustainable Cities	3
NASX 232D	MT Indians: Cultures, Histories, Current Issues	3
NASX 415	Native Food Systems	3
NRSM 421	Holistic Thought/Mgmt	4
NUTR 301	Food and Culture	3
NUTR 351	Nutrition and Society (if not taken above)	3
NUTR 430	Food Processing	3
NUTR 435	Experimental Foods	3
NUTR 496	Practicum Food Product Development	3
PSCI 230D	Introduction to International Relations	3
PSCI 415	The Political Economy of Energy	3
PSCI 470	Rural Politics	3
SFBS 346	Sustainable Food and Bioenergy Systems Summer Field Course	1
SFBS 429	Small Business and Entrepreneurship in Food and Health (if not taken above)	3
SFBS 445R	Culinary Marketing: Farm/Table	3
SFBS 490R	Undergraduate Research	1-6
SFBS 492	Independent Study	1-3

Because some of our courses are offered during alternate years, the proposed scheduling of courses in junior and senior years may need to be modified. Work with an advisor to determine an individual schedule.

**A minimum of 120 credits is required for graduation, 42 of which must be numbered 300 and above.**