

**MONTANA STATE UNIVERSITY - DEPARTMENT OF LAND RESOURCES & ENVIRONMENTAL SCIENCES**  
**Degree Requirements for a B. S. in Sustainable Foods & Bioenergy Systems - Agroecology Option**  
**2017 - 2018 Catalog**

**Name:** \_\_\_\_\_ **GID#:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Graduating Semester:** \_\_\_\_\_

*A minimum of 120 credits is required for graduation; at least 42 of these credits must be in courses numbered 300 and above.*  
**ALL DEPARTMENTAL REQUIREMENTS & THEIR PREREQUISITES MUST BE A GRADE OF C- OR BETTER**

**GRADUATION WORKSHEETS ARE DUE ONE YEAR BEFORE GRADUATION**

**DEPARTMENTAL REQUIREMENTS: 86 Credits**

Subject/#	Course Title	Credits	Semester	Year	EXCEPTONS
<b>Freshman Year</b>					
ENSC 110	Land Resources & Environmental Sciences	3	F		
CHMY 141	College Chemistry I	4	F S Su (F)		
M 121Q	College Algebra	3	F S Su (F)		
ECNS 101IS	Economic Way of Thinking	3	F S Su (F)		
WRIT 101W	College Writing	3	F S Su (F)		
SFBS 146	Intro Sust Food/Bioenergy Systems	3	S		
BIOB 170IN	Principles Biological Diversity	4	F S (S)		
BIOB 110CS	Introduction to Plant Biology	3	S		
US Core	University Seminar	3	F S		
<b>Sophomore Year</b>		<b>Credits</b>	<b>Semester</b>		
ENSC 245IN	Soils	3	F		
NUTR 221CS	Basic Human Nutrition	3	F S Su (F)		
BIOB 160	Principles of Living Systems	4	S		
CHMY 143	College Chemistry II	4	S		
CHMY 123 or CHMY 211	Intro to Organic Biochemistry	4	F S Su (S)		
	Elements of Organic Chemistry	5	F S (S)		
ENSC 210 or ECHM 205CS	Role of Plants in the Environment	3	S		
	Energy & Sustainability	3	F S (F)		
GPHY 284	Intro to GIS Science & Cartography	3	F S (S)		
NUTR 226	Food Fundamentals	3	S		
SFBS 298 or SFBS 296	Internship	3	F S Su (S)		
	Practicum: Towne's Harvest Garden	3	Su		
<b>Junior Year</b>		<b>Credits</b>	<b>Semester</b>		
BIOB 318 or STAT 216Q	Biometry	3	F		
	Introduction to Statistics	3	F S Su (F)		
NRSM 240 or BIOE 370	Natural Resource Ecology	3	F		
	General Ecology	3	F S		
ENSC 353	Environmental Biogeochemistry	3	F		
NUTR 351	Nutrition & Society	3	F		
SFBS 327	Measure innovation in Food Systems	3	F		
AGSC 341	Field Crop Production	3	S'ev		
Choose one:					
ECNS 204IS	Microeconomics	3	F S Su (S)		
AGBE 315	Ag in a Global Context	3	S' ev		
NRSM 421	Holistic Thought & Management	4	S		
SFBS 429	Small Bus & Entrepreneur Food Health	3	F		
SFBS 466	Food Syst Resilience, Vulnerab & Trans	3	S		
Univ Core and Electives			8-9		

Senior Year					
Subject/#	Course Title	Credits	Semester	Year	EXCEPTONS
Choose two:					
AGSC 401	Integrated Pest Management	3	F		
AGSC 428	Sustainable Cropping Systems	3	S		
BIOM 421	Concepts of Plant Pathology	3	S		
ENSC 443	Weed Ecology & Management	3	F		
Choose one:					
BIOE 455	Plant Ecology	3	S		
BIOO 433	Plant Physiology	3	S		
BIOM 452	Soil & Environmental Microbiology	3	S		
ENSC 468	Ecosystem Biogeochem Global Change	3	S		
SFBS 498	Internship	3	F S Su		
SFBS 499	Senior Thesis/Capstone	3	F		
Univ Core and Electives		15			

**RESTRICTED ELECTIVES - Choose a minimum of 15 credits of the following**

Subject/#	Course Title	Credits	Semester	Year	EXCEPTIONS
ANSC 222	Livestock in Sustain Systems	3	S		
ECNS 132	Econ & the Environment	3	on demand		
AGSC 342	Forages	3	F		
BIOB 375	General Genetics	3	F S Su		
BIOE 422	Insect Ecology	3	S'od		
BIOE 375	Ecol Responses Climate Change	3	S		
BIOM 360	General Microbiology	5	F S		
ENSC 407	Environmental Risk Assessment	3	F'od		
ENSC 410R	Biodiversity Methods	3	F		
GPHY 384	Adv GIS and Spatial Analysis	3	F		
GPHY 484R	Applied GIS & Spatial Analysis	3	S		
HORT 337	Vegetable Production	3	F'od		
HORT 345	Organic Market Gardening	3	Su		
NASX 415	Native Food Systems	3	F'ev		
PSCI 406	Political Economy of Energy	3	F'od		
PSCI 436	Politics of Food and Hunger	3	S		
SFBS 346	SFBS Field Course	2	Su		
SFBS 445R	Culinary Marketing: Farm/Table	3	Su		
SFBS 451R	Sustainable Food Systems	3	S		

*Because some courses are offered alternate years, the proposed scheduling of courses in junior and senior years may need to be modified.*

*Work with your advisor for your individual schedule.*

LRES Majors: ENSC 490 Undergrad Research, ENSC 492 Independent Study or ENSC 498 Internship is strongly recommended.

CORE 2.0 REQUIREMENTS - Must be a grade C- or better	Semester	Year	Course
Seminar (US)			
College Writing (W)*			
Quantitative Reasoning (Q)*			
Diversity (D)			
Contemporary Issues in Science (CS)* <b>2nd IN Course will apply to CS</b>			
Arts (IA or RA)			
Humanities (IH or RH)			
Social Sciences (IS or RS)*			
Natural Science (IN or RN)*			
Research & Creative Experience (R, RA, RH, RN or RS)			

\* Satisfied by departmental requirements