ENSP - Environment and Agriculture

NOTE: always refer to the Schedule of Classes for the most up-to-date information regarding course offerings, prerequisites & restrictions.

ENSP Core

Course	Title	Grade
All three ENSP101 (NS) ENSP102 (HS) ENSP400 (SP)	 Intro to Env Science Intro to Env Policy Senior Capstone	
Applied Science and Policy (one) ENSP305 ENSP306 ENSP330 ENSP340 ENSP342 ENSP350 ENSP370	 Applied Spatial Methods Qual Research/Env Sci Environmental Law Sci, Ethics, Law: Water Oceans: Integ. Policy Energy: Science & Policy Environmental Justice	
Calculus (pick one) MATH120 (MA) or MATH140 (MA)	 Elementary Calculus Calculus I *(recommended)*	
Statistics (pick one) BIOM301 (AR) GEOG306 (AR) PSYC200 (AR)	 Intro to Biometrics Intro to Quant Methods Stat Methods in Psyc	

Four (4) courses from the 5 groups below:

			Grade
1.	**Biology (req'd)** BSCI160 & BSCI161 or BSCII80	 Ecology & Evolution Evolution lab or Princ. Bio. Lab	
2.	**Chemistry (req'd)** CHEM131/132(NL)	 Gen Chemistry I/Lab	
3.	**Earth Sci (req'd)** ENST 200 (NL)	 Princ of Soil Science	
4.	**Economics (pick one)** AREC240 (HS) AREC241 (HS, IS) ECON200 (HS)	 Intro to Econ and Env Env, Econ, and Policy Princ of Microeconomics	
5.	**Geography (pick one)** GEOG130 (HS) GEOG140 (IS) GEOG170 NS) GEOG202 (CC)	 Development Geography Natural Disasters Meth of Geospatial Anal Intro to Human Geog	

ENSP Graduation Requirements

_____ Students must earn C- or higher in all courses used for ENSP Core and Concentration requirements.
_____ Students' major GPA must be 2.0 or higher.

General Education

Fundamental Studies (15 credits)

Requirements	Course	Cr
Academic Writing (AW)		3
Professional Writing (PW)		3
Oral Communication (OC)		3
Math (MA)	Calculus	3-4
Analytical Reasoning (AR)	Statistics	

Distributive Studies (25 credits)

Requirements	Course	Cr
Natural Sciences w/Lab (NL)	ENSP Lab Sci	4
Natural Science (NS)	ENSP 101	3
History and/or Social Sci (HS1)	ENSP 102	3
History and/or Social Sci (HS2)		4
Humanities (HU1)		3
Humanities (HU2)		3
Scholarship in Practice (SP, major)	ENSP 400	3
Scholarship in Practice (SP, non-major)		3

I-Series (6 credits)*

* May double-count with Distributive Studies

Requirements	Course	Cr
I- Series (IS)		3
I- Series (IS)		3

Diversity (4-6 credits)*

* May double-count with Distributive Studies

Requirements	Course	Cr
Understanding Plural Societies (UP)		3-6
Understanding Plural Societies (UP) *or* Cultural Competency (CC)		0-3

Experiential Learning (0-3 credits)*

* May overlap with major requirements

Requirements	Course	Cr
Practical experience is *required* in this concentration		

ENSP – Environment and Agriculture (cont'd)

REQUIREMENTS:

>>> Fundamentals and Background (5 courses, 18-19 credits):

Course	Description	Cr	Prerequisites/Notes	Grade
ANSC 101/103	Principles of Animal Science and Lab	3/1	Must be declared in ENSP-E&A	
BSCI 170	Cellular and Molecular Biology	3	MATH 120 placement or higher. BSCI171 lab now incorporated into BSCI180	
BSCI 222 *or* PLSC 203	Genetics *or* Plants, Genes and Biodiversity	4 3	BSCI160/161, BSCI 170//171 & CHEM131/132 BSCI 170/171	
CHEM 231/232	Organic Chemistry I	4	CHEM 131/132	
PLSC 112/113	Intro. Crop Science & Lab	4		

>>> Cartography, Remote Sensing, and GIS: Choose 2 courses **(6 credits)**

Course	Description	Cr	Prerequisites/Notes	Grade
GEOG 475	Adv Computer Cartography	3	GEOG 373	
GEOG 272	Introduction to Earth Observation Science	3	Formerly GEOG372: Remote Sensing	
GEOG 373	Geographic Information Systems	3		
GEOG 472	Advanced Remote Sensing	3	GEOG 372	
GEOG 473	Adv Geographic Information Systems	3	GEOG 373	

>>> Internship (3 credits):

Course	Description	Cr		Grade
ENSP 386	Internship	3-6		

RESTRICTED ELECTIVES (15-19 credits): Choose five (5) courses in one area,

>>> Area 1. Crop production and plant protection

Course	Description	Cr	Prerequisites/Notes	Grade
BSCI 361	Ecology	4	BSCI 160/161, Calculus	
ENST 411	Soil Fertility	3	ENST 200	
ENST 423	Soil-Water Pollution	3	ENST 200 and CHEM 104 or perm.	
ENST 441	Sustainable Agriculture	3		
PLSC400	Plant Physiology	4	BSCI170/171, CHEM231/232	
PLSC405	Agroecology	3		
PLSC407	Advanced Crop Science	3	PLSC112, PLSC113, BSCI160, BSCI161, and MATH113 or higher.	
PLSC411	Plant Genetics	3	BSCI17/171	
PLSC420	Plant Pathology	4	CHEM131/132	
PLSC 453	Weed Science	3		

>>> Area 2. Human dimensions

Course	Description	Cr	Prerequisites/Notes	Grade
AREC 306	Farm Management	3		
AREC 365	World Hunger, Pop, and Food Supplies	3		
AREC345	Global Poverty and Economic Development	3		
AREC 445	Agri Devmt, Pop Growth, and Env	3	ECON 200, 201 and AREC326 or perm	
AREC 455	Land Use Economics	3	ECON 200, 201 and AREC326 or perm	
ENST440	Soils, Crops and Civilization	3		
ENST441	Sustainable Agriculture	3		
GEOG330	Society & Sust. in a Time of Great Change	3		
GEOG331	Intro. Human Dimensions of Global Change	3	ANTH220, ANTH260, GEOG202, or GEOG201; or perm of GEOG dept	
GEOG 431	Culture and Natural Resource Mgmt	3		
GVPT 306	Global Ecopolitics	3	GVPT 200	
LARC151	Urban Agriculture: Designing & Assessing Edible Landscapes	3		
PLSC 303	Global Food Systems	3	BSCI 170/171	
SOCY 405	Scarcity in Modern Society	3	6 credits in SOCY	