

ENSP – Environment and Agriculture

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

ENSP Core				General Education		
Course				Fundamental Studies (15 credits)		
Title				Requirements	Course	Cr
Offered				Distributive Studies (25 credits)		
Grade				Requirements	Course	Cr
All three				I-Series (6 credits)*		
ENSP101 (NS) Intro to Env Science				* May double-count with Distributive Studies		
ENSP102 (HS) Intro to Env Policy				Requirements	Course	Cr
ENSP400 (SP) Senior Capstone				Diversity (4-6 credits)*		
Applied Science and Policy (one)				* May double-count with Distributive Studies		
ENSP305 Applied Spatial Methods				Requirements	Course	Cr
ENSP306 Qual Research/Env Sci				Experimental Learning (0-3 credits)*		
ENSP330 Environmental Law				* May overlap with major requirements		
ENSP340 Sci, Ethics, Law: Water				Requirements	Course	Cr
ENSP342 Oceans: Integ. Policy				Graduation Requirements		
ENSP350 Energy: Science & Policy				_____ Up to 6 AP courses may be used for Gen Ed		
ENSP370 Environmental Justice				_____ No more than 60 credits earned from Community College		
Calculus (pick one)				_____ Last 30 credits must be earned at Maryland		
MATH120 (MA) or Elementary Calculus				_____ 120+ cumulative credits <i>and</i> 2.0+ cum GPA		
MATH140 (MA) Calculus I (<i>recommended</i>)				Requirements		
Statistics (pick one)				Course		
BIOM301 (AR) Intro to Biometrics				Cr		
GEOG306 (AR) Intro to Quant Methods				Natural Sciences w/Lab (NL)		
PSYC200 (AR) Stat Methods in Psyc				ENSP Lab Sci		
Four (4) courses from the 5 groups below:				Natural Science (NS)		
Biology (req'd)				History and/or Social Sci (HS1)		
BSCI160/161 (NL) Ecology & Evolution/Lab				History and/or Social Sci (HS2)		
Chemistry (req'd)				Humanities (HU1)		
CHEM131/132 (NL) Gen Chemistry I/Lab				Humanities (HU2)		
Earth Sci (req'd)				Scholarship in Practice (SP, major)		
ENST 200 (NL) Princ of Soil Science				Scholarship in Practice (SP, non-major)		
Economics (pick one)				Requirements		
AREC240 (HS) Intro to Econ and Env				Course		
AREC241 (HS, IS) Env, Econ, and Policy				Cr		
ECON200 (HS) Princ of Microeconomics				Natural Sciences w/Lab (NL)		
Geography (pick one)				Natural Science (NS)		
GEOG130 (HS) Development Geography				History and/or Social Sci (HS1)		
GEOG140 (IS) Natural Disasters				History and/or Social Sci (HS2)		
GEOG170 (NS) Meth of Geospatial Anal				Humanities (HU1)		
GEOG202 (CC) Intro to Human Geog				Humanities (HU2)		
ENSP Graduation Requirements				Scholarship in Practice (SP, major)		
_____ Students must earn <u>C- or higher</u> in all courses used for ENSP				Scholarship in Practice (SP, non-major)		
Core and Concentration requirements.				Requirements		
_____ Students' major GPA must be 2.0 or higher.				Course		
				Cr		

ENSP – Environment and Agriculture (cont'd)

REQUIREMENTS:

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

Course	Description	Cr	Offered	Prerequisites/Notes	Grade
ANSC 101/103	Principles of Animal Science and Lab	3/1	F	Must be declared in ENSP-E&A	
BSCI 170/171	Cellular and Molecular Biology	4	F, Sp, Su	MATH 220 placement or higher	
BSCI 222 <i>or</i> PLSC 203	Genetics <i>or</i> Plants, Genes and Biodiversity	4 3	F, Sp, Su Sp	BSCI160/161, BSCI 170//171 & CHEM131/132 BSCI 170/171	
CHEM 231/232	Organic Chemistry I	4	F, Sp, Su	CHEM 131/132	
PLSC 112/113	Intro. Crop Science & Lab (formerly PLSC101)	4	F		

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

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

>>> Internship (3 credits):

Course	Description	Cr	Offered	Grade
ENSP 386	Internship	3-6	F, Sp, Su	

RESTRICTED ELECTIVES (15-19 credits): Choose five (5) courses in one area, which together with ENSP 386 provides integration and skill development (15-19 credits). Students may suggest additions to this list by bringing a course syllabus to the faculty advisor and explaining how the course relates to their long-term academic or career interests.

>>> Area 1. Crop production and plant protection

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

>>> Area 2. Human dimensions

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

>>> Advisor notes, approved course substitutions, etc.