

Student: _____

UID: _____

AGRICULTURE FORWARD ADVISING GUIDE
Certificate in Agricultural Business Management
to Bachelor of Science in ENST: Natural Resources Management

This is a sample academic plan for an Agriculture Forward student in the College of Agriculture and Natural Resources (AGNR) at the University of Maryland, College Park. An individualized plan will be created with each student based on math placement, transfer credits, and other academic considerations.

<u>1st YEAR, FALL SEMESTER</u>		Credit Hours	Plan	Taken	Grade
BSCI 170/171	Principles of Molecular/Cell Bio/Lab † DSNS	4	_____	_____	_____
ENGL 101	Academic Writing † FSAW	3	_____	_____	_____
INAG 102*	Agricultural Entrepreneurship	3	_____	_____	_____
MATH 120	Elementary Calculus I † FSMA/AR	3	_____	_____	_____
UNIV 100	The Student in the University	<u>1</u>	_____	_____	_____
		14		_____	_____ GPA

<u>1st YEAR, SPRING SEMESTER</u>					
BSCI 160/161	Principles of Ecology and Evolution/Lab	4	_____	_____	_____
CHEM 131/132	Fundamentals of General Chem/Lab	4	_____	_____	_____
INAG 106	Pesticide Use & Safety	2	_____	_____	_____
INAG 110	Oral Communication † FSOC	3	_____	_____	_____
PLSC 100	Introduction to Horticulture † DSNL	<u>4</u>	_____	_____	_____
		17		_____	_____ GPA


<u>SUMMER BETWEEN 1st and 2nd YEARS</u>					
INAG 288	Internship I	1	_____	_____	_____

<u>2nd YEAR, FALL SEMESTER</u>					
CHEM 231/32	Organic Chemistry I/Lab † DSNS/NL	4	_____	_____	_____
ENST 200	Fundamentals of Soil Science † NL	4	_____	_____	_____
INAG 103*	Agricultural Marketing	3	_____	_____	_____
INAG 250	Fundamentals of Agricultural Mechanics	3	_____	_____	_____
INAG 289	Internship II	<u>3</u>	_____	_____	_____
		17		_____	_____ GPA


<u>2nd YEAR, SPRING SEMESTER</u>					
ENSP 102	Intro to Env. Policy † DSHS and technical elective	3	_____	_____	_____
ENST 233	Introduction to Environmental Health † DSNS	3	_____	_____	_____
PHYS 121	Fundamentals of Physics I	4	_____	_____	_____
_____	_____ † DSHS/UP/IS	3	_____	_____	_____
_____	_____ Depth course 1	<u>3</u>	_____	_____	_____
		16		_____	_____ GPA

<u>3rd YEAR, FALL SEMESTER</u>					
BIOM 301	Introduction to Biometrics † FSAR	3	_____	_____	_____ OR
GEOG 306	Quant. Methods for Geog. Env. Sci. † FSAR	3	_____	_____	_____
BSCI 222	Principles of Genetics	4	_____	_____	_____
ENGL 39_	Professional Writing † FSPW	3	_____	_____	_____


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ENST 360	Ecosystem Ecology	4	_____	_____	_____
_____	_____ Depth course 2	<u>3</u>	_____	_____	_____
		17			_____ GPA

3rd YEAR, SPRING SEMESTER


ENST 214	Intro to Fish and Wildlife Sciences	3	_____	_____	_____
INAG 204*	Agricultural Business Management	3	_____	_____	_____
_____	_____ Depth course 3	3	_____	_____	_____
_____	_____ † DSSP	3	_____	_____	_____
_____	_____ † DSHU/IS	<u>3</u>	_____	_____	_____
		15			_____ GPA

4th YEAR, FALL SEMESTER

ENST 389***	Professional Internship	3	_____	_____	_____
ENST 487	Environmental Conflicts and Decision Making	2	_____	_____	_____
_____	_____ Tech elective 2	3	_____	_____	_____
_____	_____ Depth course 4	3	_____	_____	_____
_____	_____ Sr. Integrative Exp.	<u>3</u>	_____	_____	_____
		14			_____ GPA

* Completion of IAA Certificate Requirements *

4th YEAR, SPRING SEMESTER

_____	_____ Tech elective 3	3	_____	_____	_____
_____	_____ Tech elective 4	3	_____	_____	_____
_____	_____ † DSSP non-major	3	_____	_____	_____
_____	_____ † DSHU/UP or CC	<u>3</u>	_____	_____	_____
		12			_____ GPA

TOTAL CREDITS 123

* INAG business management course. May choose from INAG 102, 103, 201, 203, 204, or 206. With permission, ANSC 236 or 270 or AREC 306 may be substituted.

** See next page for details on Core/Depth courses. ENSP 102 has been selected for this plan because it also satisfies a general education requirement; identifying electives that meet General Education requirements can help the student meet requirements efficiently.

*** Please consult with your ENST advisor as early as possible to find out whether INAG 288/289 can satisfy the ENST internship requirement.

† General Education Requirement. Distributive Studies courses: student must take two each from HS (history/social sciences); HU (humanities); NS/NL (natural sciences; one must include a lab); and SP (Scholarship in Practice; one of these must be from outside the student's major). Among those eight courses, two must be I-Series courses and two must be Diversity courses (at least one of which must be an Understanding Plural Societies course).

Advised by: _____ Date _____ Date _____ Date _____ Date _____ Date _____

Date _____ Date _____ Date _____ Date _____

Core/Depth Courses and Electives for Natural Resources Management

Courses cannot be double-counted for more than one category.

Concentration Core (9 credits)

BSCI 222	Principles of Genetics	4
ENST 214	Introduction to Fish and Wildlife Science	3
ENST 487	Environmental Conflicts and Decision Making	2

Concentration Depth (12 credits—choose 4 courses, one from each group)

ENST 456	Spatial Analysis and Ecological Sampling	3	OR
GEOG 372	Remote Sensing	3	OR
GEOG 373	Geographic Information Systems	3	OR
INAG 237	Surveying and GPS Apps in Agriculture	3	
ENST 450	Wetland Ecology	3	OR
ENST 453	Watershed Science	3	
AREC 240	Introduction to Economics & the Environment	4	OR
AREC 241	Environment, Economics, and Policy Studies	3	OR
ENST 410	Ecosystem Services: An Integrated Analysis	3	
ENST 424	Field Study in Soil Morphology	3	OR
ENST 430	Wetland Soils	3	OR
ENST 441	Issues in Sustainable Agriculture	3	OR
ENST 462	Field Techniques in Wildlife Management	3	OR
GEOG 418	Field and Lab Techniques in Environmental Science	3	

Technical Electives (choose 12 credits)

Choose any combination; the groupings are intended to help students tailor their programs, not to limit their choices of electives.

Wildlife

ENST 460*	Principles of Wildlife Management	3	
ENST 461*	Urban Wildlife Management	3	
BSCI 334/335*	Mammalogy/Lab	4	
ENST 462*	Field Techniques in Wildlife Management	3	
ENSP 102*	Intro to Environmental Policy † DSHS	3	
PLSC 254*	Woody Plants for Mid-Atlantic Landscape II	3	
ENSP 330*	Intro to Environmental Law	3	OR
GVPT 273*	Intro to Environmental Politics † DSSP	3	

* Required for Professional Certification as an Associate Wildlife Biologist by The Wildlife Society.

Fisheries

ENST 314*	Fisheries Sustainability and Management	3
COMM 250*	Introduction to Communication Inquiry	3
COMM 382*	Essentials of Intercultural Communication † DVCC	3
GEOG 331*	Introduction to Human Dimensions of Global Change	3
GEOG 416*	Conceptualizing/Modeling Human-Env. Interaction	3
ENSP 102*	Intro to Environmental Policy † DSHS	3
ENSP 330*	Intro to Environmental Law	3
GVPT 273*	Intro to Environmental Politics † DSSP	3

* Required for Professional Certification as an Associate Fisheries Professional by the American Fisheries Society.

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Wetlands

ENST 430*	Wetland Soils	3	
ENST 450*	Wetland Ecology	3	
ENST 452*	Wetland Creation and Restoration	3	
GEOL 452*	Watershed and Wetland Hydrology	3	
PLSC 4890*	Plant Taxonomy	3	OR
PLSC 254*	Woody Plants for Mid-Atlantic Landscapes II	3	

* Required for Professional Certification as a Wetland Professional in Training (WPIT) by The Society of Wetland Scientists Professional Certification Program (SWSPCP).

Forestry

PLSC 253	Woody Plants for Mid-Atlantic Landscapes I	3	
PLSC 254	Woody Plants for Mid-Atlantic Landscapes II	3	
PLSC 400	Plant Physiology	4	
PLSC 471	Forest Ecology	3	

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Ag Forward Advising Checklist for Agricultural Business Management Students

To earn a Certificate in Applied Agriculture, Ag Forward students must complete **60 credits** in accordance with the requirements listed below.

Fundamental Studies (9 credits)

- INAG110 Oral Communication (3)
- ENGL101 Academic Writing (3)
- MATH113 College Algebra and Trigonometry (3) or higher

Fundamental Agricultural Science (4 credits)

One course from the following list:

- INAG100 Introduction to Plant Science (4)
- PLSC100 Introduction to Horticulture (4)
- PLSC101 Introductory Crop Science (4)
- ANSC101 & 103 Principles of Animal Science & Lab (4)
- NFSC100 Elements of Nutrition (3)

Applied Agriculture (13 credits)

One course from the following list:

- INAG105 Soils and Fertilizers (3)
- ENST200 Fundamentals of Soil Science (4)

All of the following courses:

- INAG106 Pesticide Use and Safety (2)
- INAG250 Fundamentals of Agricultural Mechanics (3)
- INAG288 Agricultural Practicum (1)
- INAG 289 Internship (3)

Business Management (9 credits)

Three courses from the following list:

- INAG102 Agricultural Entrepreneurship (3)
- INAG103 Agricultural Marketing (3)
- INAG201 Agricultural Human Resource Management (3)
- INAG203 Agricultural Finance (3)
- INAG204 Agricultural Business Management (3)
- INAG206 Agricultural Business Law (3)
- AREC 306 Farm Mgmt and Sustainable Food Production (3)

Agriculture and Natural Resources (25+ credits) with advisor approval:

- ENST 233: Introduction to Environmental Health (3)
- ENST 360: Ecosystem Ecology (4)
- ENSP 102: Intro to Environmental Policy (3)
- ENST 214: Intro to Fish and Wildlife Science (3)
- _____ Depth course 1 (3)
- _____ Depth course 2 (3)
- _____ Depth course 3 (3)
- ENST 487: Environmental Conflict and Decision Making (2)
- _____ Depth course 4 (3)