

Agroecosystem Science MS Course Requirement Checklist

Student's Name _____ Advisor _____

Semester/Grade Earned

ESGP Required Courses (12 credit hours)

_____/_____
 _____/_____
 _____/_____

ESGP 7899 ESGP Seminar (1 crhr)
 ESGP 7899 ESGP Seminar (1 crhr)
 ESGP 7899 ESGP Seminar (1 crhr)

_____/_____

Biological Sciences Approved Course (*See Appendix) (3 crhrs)

_____/_____

Physical Sciences Approved Course (*See Appendix) (3 crhrs)

_____/_____

Social Sciences Approved Course (*See Appendix) (3 crhrs)

Semester/Grade Earned

Agroecosystem Sciences Required Courses (5 credit hours)

_____/_____
 _____/_____
 _____/_____

2 of these 3 courses

Entomol 7890 Agrosystems Special Topic (1 crhr)
 ENR 8890.03 Agrosystems Special Topic (1 crhr)
 EEOB 8896.04 Agrosystems Special Topic (1 crhr)

and

_____/_____

Geography 5210 Fundamentals of Geographic Information Systems (3 crhrs)

Semester/Grade Earned

Electives (3 credit hours) With advisor's guidance and approval, select from the following list of ESGP courses:

_____/_____
 _____/_____
 _____/_____
 _____/_____
 _____/_____
 _____/_____

AEDECON 6120 Applied Quantitative Methods II (4 crhrs)
 AEDECON 7120 Adv Quantitative Methods II (3 crhrs)
 AEDECON 7130 Adv Quantitative Methods III (3 crhrs)
 CIVILEN 5420 Remote Sensing of Environment (3 crhrs)
 ENVENG 7217 Applied Mathematical Ecology (3 crhrs)
 FABENG 3510 Intro to Biological Engineering (4 crhrs)

Semester/Grade Earned

Research Credits (10 credit hours)

Research Hours in Advisor's home department

In addition to the general Graduate School requirements of a cumulative grade point average of 3.0 or higher, students must meet specific college policies regarding grades in courses.

I certify that the above named student has meet the requirements for completion of the MS.

Signature _____

Date _____

*Appendix

Core and Elective Courses in Biological Sciences

The objective of this core course area is to ensure that students are familiar with the diversity and functioning of organisms and the interactions among species and between organisms and the environment. Because the environmental sciences focus on the relationships between living organisms and their environment, the basic principles of ecology and a solid understanding of ecosystems structure and function is the focus of the ESGP core. This understanding can be gained through coursework that focuses on a particular taxon or a particular kind of ecosystem, but must be broadly applicable to any environment.

Environment and Natural Resources

ENR 5225	Ecosystems Modeling	3 credits	
ENR 5250.01 and 5250.02	Wetland Ecology Restoration and Wetland Field Laboratory	4 credits	AU
ENR 5263	Biology of Soil Ecosystems	3 credits	SP

Evolution, Ecology and Organismal Biology

EEOB 5470	Community and Ecosystem Ecology	3 credits	SP
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Horticulture and Crop Science

HCS 5602	The Ecology of Agriculture	3 credits	AU
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Core and Elective Courses in Physical Sciences

The objective of this core area is to provide an understanding of physical structure and processes in which ecosystems must function. Physical structure includes soil, water, air, geological media, climate, nutrients, and contaminants. Physical science processes include movement of “abiotic” matter and energy through ecosystems. Core courses must (1) study fundamental physical, hydrological, chemical, or biogeochemical processes and (2) study and emphasize the effects of physical structure and processes on ecosystem biotic components and function and the interactions between the biotic and abiotic components of the ecosystem.

Environment and Natural Resources

ENR 5222/FABENG 5310/ENVENG 5310	Ecological Engineering and Science	4 credits	SP
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Food, Agriculture and Biological Engineering

FABENG 5310/ENR 5222/ENVENG 5180	Ecological Engineering and Science	4 credits	SP
FABENG 5320	Agroecosystems	3 credits	SP

Earth Science

EARTHSCI 5651	Hydrogeology	4 credits	AU
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Core and Elective Courses in Social Sciences and Policy

The objective of the social science core is to provide an understanding of concepts related to the study of human society and/or individuals and their relationships to the structure and function of the ecosystem(s) of which they are a part. Methodology includes a range of approaches, both qualitative and quantitative. Core social science courses must engage social science in a combined theoretical and/or applied study of a physical, cultural, regulatory, or economic relationship between humans and the natural and physical environment.

Environment and Natural Resources

ENR 8350	Ecosystem Management Policy	3 credits	AU
RURLSOC 5530	Sociology of Agriculture and Food Systems	3 credits	AU
RURLSOC 7560	Environmental Sociology	3 credits	SP

Agricultural, Environmental and Developmental Economics

AED 5330	Benefit-Cost Analysis	3 credits	AU
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City and Regional Planning

CRPLAN 6410	Planning for Sustainable Development	3 credits	AU
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