Environmental and Natural Resource Economics, B.S.

Degree Offered

• Bachelor of Science

Nature of the Program

The objective of this major is to provide students with the necessary training for the application of economic theory and analysis to environmental and natural resource issues. The flexibility of this major allows students to design (with their advisor) a program of study which focuses on environmental and natural resource issues tailored to the student's own interests (such as water use and quality, soil protection, waste management, ecosystem management, and land use). The curriculum reflects the breadth of training required to prepare students for careers in private and government sectors dealing with environmental and natural resource management and policy analysis.

Students with this major can expect to find employment with state and federal government agencies or with private industry in environmental policy analysis and management of natural resources. Many students, upon completion of this degree, may find it desirable to obtain a graduate degree to expand their career opportunities. Students completing this degree will be prepared for graduate study in environmental and natural resource economics and policy.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef/)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		36
Environmental and Natural Resour	rces Economics Major Requirements	84
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (C	GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
Outstanding GEF Requirements 1, 5, 6, and 7		15
ANRD 191	First-Year Seminar	1

General Electives

Total Hours

Environmental and Natural Resource Economics Major Requirements

ESWS 202 Principles of Soil Science 8 202L and Principles of Soil Science Laboratory BIOL 101 General Biology 1 Laboratory CHEM 111 Survey of General, Organic, and Biological Chemistry 1 and Survey of Chemistry 1 Laboratory CHEM 111 and General Biology 1 Laboratory CHEM 111 and General Biological Chemistry 1 Laboratory GEOL 101 Planet Earth and Planet Earth Laboratory A 101L and Principles of Plant Science Laboratory AGEE 110 Microcomputer Applications in Agricultural Education 3- or CS 101 Introductory Agricultural and Agricultural Education 3- or CS 101 Introductory Agricultural and Agricultural Education 3- ARE 150 Introductory Agricultural and Agricultural Education 3- ARE 200 Introductory Environmental and Resource Economics 3- ARE 415 Energy Resource Economics (Cursts as Writing Course Requirement) 3- ARE 445 Energy Economics 3- ARE 446 Career Development 3- ARE 4496 Senior Thesis (Capstone Experience) 3- CON 202 Principles of Macroeconomics (GEF 8)	Code		Hours
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Restricted Electives (selected in consultation):	& 440L		
	RESM 480	Environmental Regulation	3
Student must select either an approved minor or at least 12 hours at the 300 or 400 level in AGRN, ARE, DSGN, ECON, ENVP, FMAN, FOR,	Restricted Electives (selected in cor	nsultation): **	21
GEOG, HORT, PLSC, RESM, or WMAN.			

Total Hours

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Consult with Undergraduate Coordinator for approval of Capstone Experience (Senior Thesis).

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84

SUGGESTED PLAN OF STUDY

First Year				
Fall	Hours	Spring	Hours	
ANRD 191		1 ARE 150 (GEF 4)		3
ENGL 101 (GEF 1)		3 CS 101		4
MATH 124 (GEF 3)		3 ESWS 155 (Suggested Restricted Elective - GEF 8)		3
GEF 2 (Science with Lab)		4 ECON 225		3
GEF 5, 6, or 7		3 MATH 150		3
		14		16
Second Year				
Fall	Hours	Spring	Hours	
ARE 187		3 ESWS 202		4
		& 202L (Suggested Restricted Elective)		
ARE 220		3 ECON 202		3
ENGL 102 (GEF 1)		3 GEF 5, 6, 7		3
GEF 8 (Science with Lab)		4 Free Elective		3
GEF 5, 6, or 7		3 Free Elective		3
		16		16
Third Year				
Fall	Hours	Spring	Hours	
ARE 382		3 ARE 440 (Suggested Restricted Elective)		3
ARE 488		1 ARE 445		3
ECON 301		3 ECON 302		3
RESM 440		3 RESM 480		3
& 440L				
Restricted Elective		3 Free Elective		3
Free Elective		3		
		16		15
Fourth Year				
Fall	Hours	Spring	Hours	
ARE 496		1 ARE 410		3
ECON 421		3 ARE 450		3
ESWS 355 (Suggested Restricted Elective)		3 ARE 496		2
Restricted Elective		3 ECON 425		3
Free Elective		3 Free Elective		3
		13		14

Total credit hours: 120

Major Learning Outcomes ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS

After completing this major students will be able to:

- 1. Apply the tools of economic analyses to environmental issues.
- 2. Demonstrate how to apply economic theory to the management of renewable and non-renewable natural resources.
- 3. Articulate the laws and regulations related to environmental protection, energy use, and management of natural resources.
- 4. Demonstrate the utilization of quantitative analysis tools.
- 5. Communicate effectively in a business or professional setting (written and oral).