Global Resource Systems

Global Resource Systems is an interdisciplinary, College of Agriculture and Life Sciences major that prepares students to make a difference in the world. The major emphasizes global engagement while equipping students with a strong technical competency in a resource area of their choice. The interdisciplinary program prepares students to work on complex global resource issues through leadership positions in global businesses, governmental agencies engaged in international trade and development, non-governmental organizations and globally engaged foundations, educational institutions, and volunteer organizations. It produces systemic thinkers and problem solvers with a global perspective who are trained in resource issues and able to lead teams representing high levels of cultural diversity. Students interested in this major are encouraged to contact the Faculty Coordinator at globe@iastate.edu .

Undergraduate Study

The Global Resource Systems undergraduate major employs a truly interdisciplinary and systemic approach to understanding complex global resource issues. Students develop a core set of technical competencies in a resource area selected from among the majors, minors and certificates offered by the College of Agriculture and Life Sciences. Students choose a world region in which to specialize, develop competency in a relevant world language, and participate in a significant cross-cultural immersion experience. They carry out a senior project related to their resource specialization within the context of the world region.

Multidisciplinary themes are developed in the context of the physical, biological and sociological factors affecting global resource systems. In this context, resource systems include agricultural (including crops, livestock and aquaculture), food, fuel, natural, environmental, biological, financial, governmental, institutional, human, knowledge, and other resources. Graduates of this program have transnational leadership skills and are successful integrators of various specializations on a team. They are skilled in applying a systemic perspective and developing solutions to complex global resource systems problems using innovativeness and creativity. Future professionals communicate effectively and demonstrate environmental awareness, exhibit an ethical perspective, and display clear analysis of how cultural diversity impacts work both here and abroad. They also recognize opportunities for learning after graduation.

A degree in Global Resource Systems opens the door to employment opportunities in the many businesses and organizations that require globally competent employees.

Curriculum in Global Resource Systems

Administered by a supervisory committee in the College of Agriculture and Life Sciences. Students choose a region of the world to develop an expertise; they choose a language to learn and develop proficiency through the intermediate level; they choose and possess an area of technical expertise by completing a minor or certificate program in the College of Agriculture and Life Sciences; they complete a required internship in an international setting; and they select and complete a senior research project with faculty mentoring.

Total Degree Requirement: 129 cr.

Only 65 cr. from a two-year institution may apply which may include up to 16 technical cr.; 9 P-NP cr. of free electives; 2.00 minimum GPA.

International Perspective: 3 cr.

3 cr. from approved list	3

U.S. Diversity: 3 cr.

3 cr. from aproved list	3

Communications Proficiency:

English composition (6 credits with a grade of C or higher; see courses below.)	
Speech fundamentals (3 credits with a grade of C or higher; see courses below.)	

Communication/Library: 13 cr.

ENGL 150	Critical Thinking and Communication	3
ENGL 250	Written, Oral, Visual, and Electronic Composition	3
SP CM 212	Fundamentals of Public Speaking	3
or AGEDS 311	Presentation and Sales Strategies for Agricultural Audiences	
ENGL 302	Business Communication	3
or ENGL 309	Report and Proposal Writing	
or ENGL 314	Technical Communication	
LIB 160	Information Literacy	1
Total Credits		**13**

Humanities and Social Sciences: 6 cr.

ECON 101	Principles of Microeconomics	3
or ECON 102	Principles of Macroeconomics	
Plus three credit hours from approved humanities list		3
Total Credits		**6**

Ethics: 3 cr.

3 cr. from approved list	3

Life Sciences: 7 cr.

BIOL 211 & 211L	Principles of Biology I and Principles of Biology Laboratory I	4
Plus 3 cr. from approved life sciences list at 300-level or higher		3

Mathematical Sciences: 6 cr.

MATH 140	College Algebra (or higher)	3
STAT 101	Principles of Statistics	3-4
or STAT 104	Introduction to Statistics	
Total Credits		**6-7**

Global Competency: 15-31 cr.

16 cr. of 100 and 200 level of a single WLC language and 15 cr. in global competency courses from an approved list; up to 3 cr. may be earned from a travel course.

Physical Sciences: 8 cr.

One of the following:		5
CHEM 163 & 163L	College Chemistry and Laboratory in College Chemistry	
or CHEM 177 & 177L	General Chemistry I and Laboratory in General Chemistry I	
One course from the following:		3
AGRON 154	Fundamentals of Soil Science	
or AGRON 155	Soils for Horticultural Scientists	
AGRON 206	Introduction to Weather and Climate	
AGRON 260	Soils and Environmental Quality	
AGRON 406	World Climates	
GEOL 101	Environmental Geology: Earth in Crisis	
GEOL 160	Water Resources of the World	
Total Credits		**8**

Global Resource Systems: 23 cr.

GLOBE 110	Orientation	1
3 credits of GLOBE 211		3
GLOBE 211	Issues in Global Resource Systems (Each offering is 1 cr., must be repeated for 3 cr.)	
GLOBE 201	Global Resource Systems	3
GLOBE 301	Resource Systems of Industrialized Nations	3
GLOBE 302	Resource Systems of Developing Nations	3
GLOBE 320	Global Resource Systems Internship Preparation	1
GLOBE 401	Senior Project	3
GLOBE 402	Responses to Global Resource System Challenges	3
One of the following:		3-6
GLOBE 321	Internship - Global	
GLOBE 322	Internship - United States	
Total Credits 23-26		

Technical Concentration: 15-18 cr.

Satisfied by any of the College of Agriculture and Life Sciences minors or a certificate offered in the College of Agriculture and Life Sciences.

Electives:

Sufficient coursework to ensure a total of not less than 129 credits