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 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.

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

U. S. Diversity: 3 cr.

3 cr. from approved list

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

ENGL 250 Written, Oral, Visual, and Electronic Composition

SP CM 212 Fundamentals of Public Speaking

or AGEDS 311 Presentation and Sales Strategies for Agricultural Audiences


GLOBAL 302 Business Communication

or ENGL 309 Report and Proposal Writing

or ENGL 314 Technical Communication

LIB 160 Information Literacy

Total Credits 13

Humanities and Social Sciences: 6 cr.

ECON 101 Principles of Microeconomics

or ECON 102 Principles of Macroeconomics

Plus three credit hours from approved humanities list

Total Credits 6

Ethics: 3 cr.

3 cr. from approved list

Life Sciences: 7 cr.

BIOL 211 Principles of Biology I

& 211L and Principles of Biology Laboratory I

Plus 3 cr. from approved life sciences list at 300-level or higher

Mathematical Sciences: 6 cr.

MATH 140 College Algebra (or higher)

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:

CHEM 163 College Chemistry

& 163L and Laboratory in College Chemistry

or CHEM 177 General Chemistry I

& 177L and Laboratory in General Chemistry I

One course from the following:

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 110 Orientation

GLOBAL 201 Issues in Global Resource Systems (Each offering is 1 cr., must be repeated for 3 cr.)

GLOBAL 301 Resource Systems of Industrialized Nations

GLOBAL 302 Resource Systems of Developing Nations

GLOBAL 320 Global Resource Systems Internship Preparation

GLOBAL 401 Senior Project

GLOBAL 402 Responses to Global Resource System Challenges

One of the following:

GLOBAL 321 Internship - Global

GLOBAL 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