PURDUE UNIVERSITY

ECOLOGICAL SCIENCES & ENGINEERING

INTERDISCIPLINARY GRADUATE PROGRAM

"If we acknowledge the value of protecting and promoting the natural environment, we can inspire lasting changes in attitudes that lead to sustaining our long-term health and the planet on which we depend."

Dr. Linda S. Lee, ESE Program Head

Reducing our ecological footprint...

through innovative discovery, life-cycle thinking, and sustainable management of natural resources. Understanding the dynamic, complex processes that link human activity and ecological systems is essential to improving the way we manage our natural resources and develop solutions to the environmental threats facing the world today. **The Ecological Sciences and Engineering (ESE) Program** provides students with an interdisciplinary educational experience that integrates the science and engineering concepts needed to address grand challenges in environmental sciences. Web: http://www.purdue.edu/DP/ese

Fellowship Opportunities for Fall 2010 Entry!

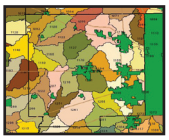
Competitive fellowships are open to any ESE research area as well as these additional fellowships for 2010 incoming applicants targeting:

- Agro-ecosystem services bridging agriculture and environment
- Ecosystem dynamics assessment using advanced technologies of simulation models, geographic information systems, statistical analysis, and remote sensing.

"I have found the ESE program to be intellectually stimulating, with topics relevant to my research. Working in interdisciplinary groups will be very beneficial to my future work."

"I'm an MS student looking to enter industry. I've benefited from the unique professional development offerings of the ESE program, along with the opportunity to take a leadership role in planning a symposium."

Themes



Earth Systems Interactions

Green Technology

Human Impacts on Biosphere Processes

Managed Ecosystems

Sustainable Urban Environments

ENVIRONMENT@PURDUE.EDU
HTTP://WWW.PURDUE.EDU/DP/ESE

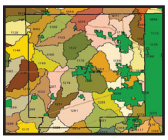
ECOLOGICAL SCIENCES & ENGINEERING INTERDISCIPLINARY GRADUATE PROGRAM

PURDUE UNIVERSITY

The graduate program welcomes applications from students with diverse backgrounds including the natural sciences, engineering, humanities, and social sciences. Please note that students do not need to have an engineering background to enter the program, unless they are considering an M.S.E or PhD that focuses on engineering research. Visit our Website for admission requirements.

How the Program Works:

Students choose a primary theme for their graduate studies. Each theme draws from several core course areas, with flexibility built in allowing the student and their committee to tailor their plan of study in relation to their specific focus area or unique area of research. Students have an office in their affiliated "home" department, normally that of their major faculty advisor. Applicants are encouraged to begin communicating with our faculty early in the process. Review our faculty at the ESE Website http://www.purdue.edu/DP/ese



Earth Systems Interactions

Observe and analyze the dynamics of earth systems interactions through climate, hydrologic, and land use systems study at landscape to global scales.

Green Technology

Innovate changes in daily life through material production and process development that provide a healthy quality of life without compromising the ecosystem, human health, or the ability of future generations to meet their own needs.

Human Impacts on Biosphere Processes

Assess human activity on natural ecosystem health and resources including water quality, quantity, and movement, soil health, air quality, and biodiversity.

Managed Ecosystems

Apply cross-disciplinary approaches to ecological and environmental assessment and management of complex ecosystems including agriculturally-dominant landscapes, forests, wetlands, conservation lands and refuges.

Sustainable Urban Environments

Design urban communities that provide a high quality life that meets the needs of more people with a reduced carbon and ecological footprint.

Program Benefits:

Interdisciplinary approach to courses and research
Access to cutting-edge labs and field stations
Unique professional development opportunities
Collaboration with diverse top faculty and students

Contact us:

Application and general ESE questions:
ese@purdue.edu
ESE Program Head: lslee@purdue.edu
Please view our Website for detailed information:
http://www.purdue.edu/DP/ese