



Discovery Park Impact

Serving as a catalyst to promote collaborative inter-disciplinary environmental and ecological research through graduate education

NEED

The Ecological Sciences & Engineering Interdisciplinary Graduate Program (ESE IGP) was birthed out of a need to enhance recruiting in the environment-related areas across campus and provide an educational structure that produced broader thinking students across multiple disciplines in the context of environmental sustainability.

INITIATIVE

The ESE IGP, developed by a group of faculty from across campus, was approved in 2003 and launched in fall of 2005, which was facilitated by the newly launched Center for the Environment. The Ecological Sciences & Engineering Interdisciplinary Graduate Program (ESE-IGP) provides students with educational and research experiences that integrate engineering, science, policy, and life cycle thinking concepts to addressing sustainable solutions that cut across multiple disciplines. The ESE IGP partners with a variety of academic units that provide the discipline foundation under a set of complementary integrating themes. The ESE IGP also serves as a catalyst to promote collaborative inter-disciplinary environmental and ecological research among Purdue University faculty members.

IMPACT

- The ESE-IGP is transforming graduate education for many at Purdue. The ESE is facilitating the development of broader thinking students in the context of sustainability and resilience that cuts across multiple disciplines, and exposing them to a wide variety of environmental work at Purdue.
- The ESE-IGP is enhancing recruitment of top graduate students to Purdue in all environment-related areas at Purdue, which is benefiting multiple academic units. Faculty from 6 units within the Colleges of Agriculture, Engineering, and Science stated that the ESE IGP applicants had higher GPAs, GRE scores, and level of maturity than applicants through their traditional department portal in their area of interest.
- Applicants increased from 7 in 2007 to 38 for 2008 (70% accepted), to over 40 prospects as of October 1, 2008 for the 2009 academic year.
- Professional development through coursework and activities such as the ESE campus-wide symposium that attracted 175 students, faculty, and citizens last year to Purdue on the topic of sustainability.
- The overwhelmingly positive impact of the ESE IGP on graduate recruitment and education has resulted on financial support from the Deans of the Colleges of Agriculture, Engineering, Liberal Arts, Science, and Technology and the Provost Office for the 2008-2009 academic year.

Representative quotes from Graduate Students in the ESE Program

"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."

"The ESE program has provided wonderful opportunities for learning, professional development, and project collaboration. The program allows me to gain a broad understanding of environmental issues."

"The ESE program has expanded my thinking beyond anything I expected. The ESE seminar has spawned fruitful discussion and integration between science-, engineering-, and policy-based students in developing a framework for achieving sustainable and resilient solutions."