

**Advancing Engineering Education Research to
Meet the Needs of the 21st Century**

Call for Applications

Institute for Scholarship on Engineering Education (ISEE) 2006-07



July 9 – 14, 2006: ISEE Summer Summit Kick-off Meeting

Howard University, Washington, D.C.

A unique year long research opportunity sponsored by the Center for the Advancement of Engineering Education (CAEE) to advance state-of-the-art scholarship in engineering education

Application Deadline: March 6, 2006

What are crucial needs of the 21st century? The theme for this year's ISEE is diversity. This theme of diversity incorporates a "nation as laboratory" idea that builds on previous themes of "class as lab" (U Washington 2004-05) and "campus as lab" (Stanford 2005-06). A "nation as lab" theme emphasizes the need to approach engineering education from ALL perspectives:

- Although there are many exemplary programs for increasing the diversity of the engineering profession, our community has hit a plateau—we need to identify "next tier" strategies. What do we know about our students? What brings them into engineering and what keeps them there? How do they navigate an engineering education?
- What are opportunities to impact institutional cultures? What can we learn about effective strategies for a "scholarship of impact"?
- What are key principles behind the successes of exemplary programs? What does this suggest regarding "scaling up" programs or informing other programs in other educational settings?
- We also need to better understand the impact of a more diverse profession on the nature of engineering work. What ways of knowing leverage different perspectives that promote effective solutions to ever-increasing complex social and technological problems?

The *Institute for Scholarship on Engineering Education* (ISEE) is a year long intense, interactive, and hands-on approach for impacting engineering education in a scholarly way. ISEE seeks to advance engineering education by:

- Investigating engineering student learning and advancing the scholarship in this field
- Using research to make a difference locally and nationally
- Developing community networks for supporting long term professional growth and fulfillment

The ISEE Experience

Application Process (Closing Date: March 6, 2006)	15 Scholars will be selected on the basis of submitted applications The application process provides opportunities for individuals and teams of 2-3.
Summer Summit "kick-off" at Howard U. (July 9-14, 2006)	Learn about complexities of human learning Develop education research skills Formulate and plan a study
Year long Project on your home campus (2006-07 Academic Year)	Collaborate to gather data on your campus Analyze and synthesize findings Interact with the ISEE community
Final Leadership Meeting (Autumn 2007)	Present and share study results with peers Extend community Identify future opportunities Receive feedback on next phase of activity

Who Is Eligible: ISEE 2006-07 encourages applications from engineering faculty and administrators of diversity-related programs in diverse institutional settings. A particular emphasis is on building teams of Scholars to promote local communities of engineering education researchers.

Who should apply: Please consider applying if you:

- Have a nagging question and want to take the next step to transform it into a research study.
- Want to be part of a growing engineering education research community.
- Want to engage in deep conversations with individuals who share similar interests in advancing engineering education.
- Have always wanted to do this kind of research but don't know how to get started.

Honorarium: ISEE covers all travel and lodging expenses for the Summer Summit. Faculty Scholars receive a \$2500 honorarium for travel and research expenses to support their ISEE project (such as attending and presenting work at engineering education conferences). For example, 2004-05 Scholars ran a large interactive poster session at the 2005 Frontiers in Education Conference.

To learn more about ISEE or ask questions about the application process, please contact Dr. Robin Adams (rsadams@purdue.edu) or Dr. Lorraine Fleming (lfleming@howard.edu).

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