

2 February 2008



## CIESE awarded \$500K grant from Edison Venture Fund

### *Grant will be used to develop high school systems engineering curriculum*

HOBOKEN, N.J. — The Center for Innovation in Engineering and Science Education (CIESE) at Stevens Institute of Technology has received a \$500,000 grant from the Edison Venture Fund to develop a series of global and systems engineering curriculum modules for high school students. Edison partners with entrepreneurs, service providers and other financing sources to build successful companies and provides capital and value-added services to expansion stage information technology businesses.

This project will develop, pilot and disseminate, via face-to-face and online professional development, four curriculum modules that introduce concepts and approaches of systems and global engineering to high school technology and engineering students.

"Engineering's role in society, as well as its practice, will change dramatically in the 21 st century. The design, interoperability, and maintenance of highly complex systems in a globally-distributed environment in domains as critical as homeland security and aviation, to information security, new product development, and environmental remediation, necessitates that engineers transcend beyond discipline-specific boundaries to develop a systems perspective," said CIESE director Beth McGrath . "In this project, we will be working with our partners to develop materials that bring the concepts and skills of global and systems engineering to high school students."

By the end of the project, approximately 700 teachers in New Jersey and across the US, as well as internationally, will have learned about the Systems and Global Engineering modules and that at least 100 schools will be involved in an extended, intensive Systems and Global Engineering classroom project.

This effort will involve representatives from CIESE and faculty from Stevens' School of Systems and Enterprises Stevens, who will partner with the New Jersey Technology Educators Association of New Jersey (NJTEA). John Martinson, managing partner of Edison Venture Fund commented, "We are proud to support CIESE creating another unique program to assist teachers to motivate New Jersey students to consider engineering as a college major and career choice. Edison Venture has supported NJTEA for seven years."

As an outcome of the module, students will apply science and mathematics principles toward the development of an engineered product or system; utilize state-of-the-art industrial software to collaborate on the design; practice such "21 st century skills" as inventive thinking and problem-solving to develop designs; collaborate on class-based and worldwide teams; and develop and present a final product.

#### **About the Center for Innovation in Engineering and Science Education**

Stevens Institute of Technology's Center for Innovation in Engineering and Science Education has launched a statewide initiative aimed at increasing the pool and capabilities of students who will pursue engineering and technology degrees and careers. Engineering Our Future NJ (EOFNJ), based at Stevens, is a collaboration of more than 10 New Jersey colleges and universities, informal science education organizations, corporations and other educational associations, to promote engineering and technology to students, teachers, administrators, and other educational stakeholders. EOFNJ was launched through seed funding from the State of New Jersey in 2006 and has since secured a corporate investment of \$550,000 from two major New Jersey high-tech corporations (Verizon and Honeywell) as well as public grants to conduct K-12 engineering education and research programs (from the National Science Foundation and the N.J. Department of Education). In May 2007, Stevens convened a leadership summit for 250 of New Jersey 's educational leaders, in partnership with the N.J. Department of Education and the N.J. Principals and Supervisors Association, to articulate the need to cultivate technological talent and a culture of innovation in K-12 students, and to share proven strategies that partner institutions around the state are implementing. Eight New Jersey colleges and universities, as well as practicing researchers, teachers and professional organizations, presented at this conference.

#### **About Edison Venture Fund**

Established in 1986 by John Martinson, Edison partners with entrepreneurs, service providers and other financing sources to build successful companies. Edison provides capital and value-added services to expansion stage (\$5 million to \$20 million revenue), information technology businesses. Initial investments range from \$5 million to \$8 million. Edison typically serves as a sole or lead investor in financings up to \$10 million. In addition to providing expansion capital, Edison funds management buyouts, recapitalizations, spinouts and secondary stock purchases.

Edison's investment professionals are based in Lawrenceville , N.J. ; New York , N.Y. ; West Chester , Pa. ; and McLean , Va. Industry specialties include application software, communications, financial technology, interactive marketing, healthcare & pharmaceutical IT. Edison 's successes include Best Software, Dendrite, E-Transport, Gain Capital, Liberty Tax, MathSoft, Princeton Financial , Visual Networks, Virtual Edge, Vocus and many other information technology leaders, which have a combined market value exceeding \$5 billion. Edison currently has \$550 million under management and is actively making new investments. For more information, please visit [www.edisonventure.com](http://www.edisonventure.com)

## About Stevens Institute of Technology

Founded in 1870, Stevens Institute of Technology is one of the leading technological universities in the world dedicated to learning and research. Through its broad-based curricula, nurturing of creative inventiveness, and cross disciplinary research, the Institute is at the forefront of global challenges in engineering, science, and technology management. Partnerships and collaboration between, and among, business, industry, government and other universities contribute to the enriched environment of the Institute. A new model for technology commercialization in academe, known as Technogenesis®, involves external partners in launching business enterprises to create broad opportunities and shared value.

Stevens offers baccalaureates, master's and doctoral degrees in engineering, science, computer science and management, in addition to a baccalaureate degree in the humanities and liberal arts, and in business and technology. The university has a total enrollment of 2,040 undergraduate and 3,085 graduate students, and a worldwide online enrollment of 2,250, with a full-time tenured/tenure-track faculty of 140 and more than 200 full-time special faculty. Stevens' graduate programs have attracted international participation from China, India, Southeast Asia, Europe and Latin America. Additional information may be obtained from its web page at [www.stevens.edu](http://www.stevens.edu).

For the latest news about Stevens, please visit [StevensNewsService.com](http://StevensNewsService.com).

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This page was last updated 2 February 2008 .