



*from two great traditions,*  
**ONE BOLD FUTURE**

The Department of Industrial and Enterprise Systems Engineering

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

[www.iese.uiuc.edu](http://www.iese.uiuc.edu)



“THE GE DEPARTMENT HAS PROVIDED ME WITH A WIDE VARIETY OF TECHNICAL SKILLS, BUT MORE IMPORTANTLY, THE ABILITY TO APPLY THEM TO THE PROBLEM AT HAND. I HAVE ALSO FOUND GREAT VALUE IN THE WAY THE DEPARTMENT INTERACTS WITH OTHER ENGINEERING DEPARTMENTS AND PROGRAMS—THIS MERGER WITH IE WILL MAKE THOSE INTERACTIONS EVEN MORE REGULAR AND REWARDING.”

— ALLISON JONES, BSGE '06

The 21st-century workplace demands employees with technical literacy and an understanding of business. The new Department of Industrial and Enterprise Systems Engineering (IESE) at the University of Illinois College of Engineering answers this need emphatically. Created to lead an emerging discipline that unites business with systems engineering, IESE offers the tech-focused education students need to thrive in an enterprise-oriented world.

With top-five undergraduate and graduate program rankings, accomplished alumni whose successes have made us one of engineering's most fertile hiring grounds and a distinguished faculty boasting Nobel Laureates, a National Medal of Science winner and both current and former recipients of the National Medal of Technology, the College of Engineering at the University of Illinois at Urbana-Champaign couples a rich history of success with a world-class education for tomorrow's engineers.

IESE builds upon this tradition of excellence while simultaneously shattering tradition to forge an exciting new vision in engineering. By merging the Department of General Engineering and the Industrial Engineering program, IESE gives both programs the resources they need to attain the national and international recognition they deserve. We invite you to join us as we build a powerhouse in industrial and enterprise systems engineering.

*a natural*  
**CONVERGENCE**

Over the past several years, a spontaneous alignment has evolved between Industrial Engineering and General Engineering at the College of Engineering. General Engineering has gravitated toward industry and enterprise, hiring new faculty from industrial engineering backgrounds and developing its business side with new M.S. and Ph.D. degrees in Systems and Entrepreneurial Engineering.

Meanwhile, the Industrial Engineering program has historically produced strong faculty, research and graduates focused on enhancing the operations of industrial systems through engineering—making it the perfect partner for a GE program with a growing emphasis on enterprise.

The Department of Industrial and Enterprise Systems Engineering merges the resources and traditions of excellence

of the existing GE and IE programs. Its name effectively communicates the new department's business-focused identity while giving its component programs increased visibility within the common categories used to rank engineering schools nationwide.



*advancing traditions of*  
**EXCELLENCE**

In repeated polling of graduating GE students over the years, many have suggested a change in the department's name. After all, the term "general engineering" has never effectively conveyed the department's unique areas of excellence—from its integrated technical and business knowledge to its real-world industrial project training and world-class research reputation—to the outside world.

**"THE MERGER WILL SIGNIFICANTLY INCREASE PUBLIC AWARENESS AND NATIONAL STANDING IN THE ACADEMIC PROGRAMS OFFERED BY THE GENERAL ENGINEERING AND INDUSTRIAL ENGINEERING PROGRAMS."**

—JEFFREY M. MORRIS, BSGE '70,  
TELEPHONE PRODUCTS, INC.

The reorganization of IE empowers it to achieve national impact, giving it the critical mass it needs to attain the top-five ranking expected of all programs within the College of Engineering. At the same time, the IESE Department reflects and further encourages collaboration between industrial engineering and the enterprise side of the GE program.

Under IESE, courses and curricula won't change, nor will the titles on the diplomas of current students or alumni of the GE and IE programs. The new department was created to expand and advance the prestigious legacies of both programs—not to dismantle them. In that spirit, gifts received will be examined carefully to ensure that their use is consistent with donor intentions.

Our vision for the Department of Industrial and Enterprise Systems Engineering is strategic, yet bold. Achieving it will not be possible without the continued support of our distinguished alumni.



"IE has allowed me, as a student, to think more globally and not focus merely on small, detailed tasks. Through the new IESE department, IE will be able to further bridge the gap between engineering and business, providing a unique education that will enable students to gain more recognition when applying for internships and entry-level positions after graduation."

— COURTNEY CRUMP, BSIE '07

*preparing students for*  
**SUCCESSFUL FUTURES**

Today's intensely competitive global economy places a high premium on engineers who can work at the intersection of engineering disciplines to blend their technical and business skills in an entrepreneurial way.



The IESE Department develops these skills that are vital in today's marketplace.

Over time, the new IESE Department expects to achieve a top-five ranking with national publications, organizations and associations. The world-class education IESE will provide—and the recognition it will command—will give graduates the tools they need to succeed.

The Department of Industrial and Enterprise Systems Engineering gives students the knowledge and real-world training they need to engineer the future of industry and enterprise.

*cultivating tomorrow's*  
**LEADERS**

Entrepreneurial startups and well-established companies alike are seeking broadly competent systems engineers and industrial engineers who augment their strong technical skills with the business insight, entrepreneurial vision and leadership qualities needed to successfully bring products to market.

Combining the GE and IE programs creates an opportunity for IESE to add even more value to the college—and to its graduates' degrees. By giving students a potent mix of engineering and business skills, IESE will offer graduates—and the recruiters who work with them—the resources to enhance our nation's enterprises, communities and lives.

The Department of Industrial and Enterprise Systems Engineering hones the mix of business and engineering skills that forward-looking industry and enterprise demand.



*IESE degree*  
**PROGRAMS**

The degree programs available through the new Department of Industrial and Enterprise Systems Engineering will remain the same as those presently offered by the General Engineering Department and the Industrial Engineering program, with courses, curricula and program titles remaining intact. No immediate impact on class size, teaching loads or student-faculty ratio is envisioned. Below are the complete degree program offerings of the new IESE Department.

**UNDERGRADUATE PROGRAMS**

- The General Engineering undergraduate program offers a broad background in control systems, decision making, mechanics and structures to support a systems approach to engineering that is honed by solving real-world problems.
- The Industrial Engineering undergraduate program focuses on operations research, optimization, supply chain management and production management with the goal of creating and managing systems that integrate people, materials and energy in productive ways.

**GRADUATE PROGRAMS**

- The Master of Science and Doctor of Philosophy in Systems and Entrepreneurial Engineering develops dual competency in both traditional engineering and in the business side of engineering. It offers an approach to systems engineering, engineering design and entrepreneurial engineering that crosses disciplinary lines, with a focus on how to best manage interfaces between engineering, science, mathematics and business at the systems level.
- The joint Master of Science in Industrial and Enterprise Systems Engineering and Master of Business Administration degree program allows students to earn both graduate degrees simultaneously.
- The Master of Science and Doctor of Philosophy in Industrial Engineering offers advanced studies that focus on operations research, optimization, supply chain management, financial engineering and production management with the goal of creating and managing systems that integrate people, materials and energy in productive ways.

“THE MERGER IS A GREAT OPPORTUNITY FOR TWO WORTHY PROGRAMS—INDUSTRIAL ENGINEERING AND GENERAL ENGINEERING—TO RECEIVE THE NATIONAL RECOGNITION THEY DESERVE AND ESTABLISH THEMSELVES AS MAJOR COMPONENTS OF THE UNIVERSITY OF ILLINOIS COLLEGE OF ENGINEERING’S WORLD-CLASS INSTITUTION. THIS IS A GREAT MOVE FOR EVERYONE.”

— FREDERICK V. CHIN, BSIE '75,  
UNIVERSAL CHEMICALS AND COATING

“The merger creating IESE establishes a unique department with a clear and promising graduate focus, while maintaining the excellence of the constituent undergraduate programs.”

— DR. ROLAND L. RUHL, PRESIDENT,  
RUHL FORENSICS

“Both GE and IE are strong programs that have always combined engineering skills with solid business principles. This merger will provide an opportunity to make them even better, while retaining the same curriculum, students and faculty that have made the programs unique.”

— MICHAEL D. BRUNETTO,  
BSGE '77, ANHEUSER-BUSCH



For more information about the University of Illinois  
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