



Department of Industrial and Systems Engineering

UNIVERSITY OF WISCONSIN-MADISON

Department of Industrial & Systems Engineering

Strategic Plan

October 15, 2021

MISSION STATEMENT

To advance industrial and systems engineering knowledge, excel in inclusive education, and inspire others to make a meaningful difference in their world, through innovative and ethical applications of engineering principles.

VISION STATEMENT

To improve society by conducting world-leading research, serving the broader community, and providing an exceptional educational experience to all students.

CORE VALUES

Integrity & Respect: We uphold the highest ethical principles in our teaching, research, service, and professional practice. Our efforts are grounded in respect for those with whom we work, as well as for those we teach and serve.

Diversity, Equity & Inclusion: We take actions that advance inclusion, diversity, equity, and accessibility; striving to create an environment where all can be successful.

Collegiality & Teamwork: We encourage and support each other, teaming-up when we can accomplish more than we might individually.

Creativity & Innovation: We seek out new ideas, appreciate curiosity, and strive for impactful solutions. Autonomy and flexibility are important to our research.

Continuous Improvement & Professional Growth: We maintain an environment in which we strive to improve our work and our department. We actively pursue professional growth and development opportunities.

AREAS OF FOCUS & STRATEGIC PRIORITIES

Diversity, Equity, and Inclusion

- A. Foster a department culture that demonstrates our commitment to inclusion, diversity, equity, and access (IDEA).

Education

- B. Reinforce our efforts and investment in innovative and inclusive education.
- C. Strengthen our graduate programs and the student experience.
- D. Increase undergraduate and professional Masters enrollment in our programs and service courses.

Research Excellence and Impact

- E. Enhance and grow our research profile and impact, leveraging interdisciplinary collaborations.

Faculty and Staff Support

- F. Support the work of faculty and staff in ways that enhance work/life harmony.
- G. Invest in faculty and staff development with particular attention on junior faculty and new staff hires.

Department Administration

- H. Maintain administrative systems and support reflective of a high performing organization.

STRATEGIC PRIORITIES & ACTION ITEMS

<i>Strategic Priorities</i>	<i>Action Items</i>
A. Foster a department culture that demonstrates our commitment to inclusion, diversity, equity, and access (IDEA).	<ul style="list-style-type: none">A.1 Establish a task force comprised of faculty, staff, and students to provide leadership for IDEA efforts.A.2 Encourage and support activities within the department that increase connectedness and build a sense of belonging.A.3 Promote the value of and participation in professional development in areas that impact IDEA.
B. Reinforce our efforts and investment in innovative and inclusive education.	<ul style="list-style-type: none">B.1 Encourage the application of innovative teaching approaches, including application of hybrid and digital techniques.B.2 Identify opportunities to embed content and case studies related to IDEA within required ISyE courses.B.3 Identify and disseminate the latest scholarship and best practices related to IDEA principles in research, diverse experiences, and the wide-ranging impact of ISyE to the department.
C. Strengthen our graduate programs and the student experience.	<ul style="list-style-type: none">C.1 Bolster Ph.D. training to be more holistic and include a professional growth component that includes colloquia, training in research proposal writing, and career development.C.2 Increase Ph.D. program and Professional M.S. program enrollment.C.3 Create more community-building opportunities for graduate students, especially for M.S. students, to enhance the student experience.

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- D. Increase undergraduate and professional Masters enrollment in our programs and service courses.
- D.1 Increase awareness and understanding of ISyE among first-year, pre-college, parents, and teachers.
 - D.2 Identify opportunities to develop undergraduate service courses aligned to ISyE expertise that meet unmet demand.
 - D.3 Increase enrollment in ISYE courses from Professional M.S. students in programs housed in other departments.
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- E. Enhance and grow our research profile and impact, leveraging interdisciplinary collaborations.
- E.1 Assess, rethink, and articulate the department's areas of expertise.
 - E.2 Develop and implement a faculty hiring plan.
 - E.3 Bolster our world-class reputation and strong impact in healthcare systems engineering (HSE).
 - E.4 Lead high-impact research efforts and produce scholarship that strengthen our core areas of expertise and reputation.
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- F. Support the work of faculty and staff in ways that enhance work/life harmony.
- F.1 Develop processes that advance equity in workloads and foster balance in service contributions.
 - F.2 Promote opportunities and support efforts that enhance work/life harmony for all faculty and staff.
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- G. Invest in faculty and staff development with particular attention on junior faculty and new staff hires.
- G.1 Strengthen training, development, and mentoring of faculty and staff, especially junior faculty, teaching professors, and new staff.
 - G.2 Expand opportunities for junior faculty and instructional staff to contribute to department leadership.
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- H. Maintain administrative systems and support reflective of a high performing organization.
- H.1 Assess alignment of department committees with department's priorities; restructure if necessary.
 - H.2 Assess effectiveness of administrative support processes; sunset those no longer needed, adjust those needing improvement, develop new processes as necessary.
 - H.3 Pursue opportunities to generate revenue and manage department budgeting.