

INDUSTRIAL ENGINEERING: SYSTEMS ENGINEERING AND ANALYTICS, M.S.

This is a named option course-based program within the Industrial and Systems Engineering M.S. (<http://guide.wisc.edu/graduate/industrial-systems-engineering/industrial-engineering-ms/>)

The program in Systems Engineering and Analytics (<https://www.engr.wisc.edu/app/uploads/2017/02/SEA-Web-1.pdf>) will train students to recognize, identify, analyze, and solve decision problems arising in the efficient operations of engineering systems. The program focuses on methods and models for data analytics and data-driven decision-making.

IS THIS PROGRAM RIGHT FOR YOU?

Analytics, and the ability to effectively utilize data, is quickly becoming an important component in engineering decision making. There is a strong need in the marketplace for people who use analytical tools to transform data into insights for making better decisions. The Systems Engineering and Analytics option within the UW–Madison graduate program in Industrial and Systems Engineering offers students the opportunity to pursue graduate training in this important and emerging area, under the auspices of the foremost experts in their field, in one of the world's top-ranked departments of industrial and systems engineering. (We were ranked 8th in the latest *US News and World Report* rankings). The flexible curricula in Systems Engineering and Analytics enable students to tailor their degree program to suit their particular needs and career objectives.

After completing your degree, you will be able to analyze, process, and build conclusions based on the data you collect in the design, testing, and operations phases of engineering and design processes.

The program includes training in optimization models and methods, applied industrial analytics, simulation modeling and analysis, and courses wherein these analytical and computational tools are applied in an engineering systems setting. These learned skills are now highly sought after in manufacturing, transportation, finance, healthcare, and other industrial sectors.

WHAT YOU LEARN

- Acquire mathematical, scientific, and engineering principles in analytics.
- Utilize data-driven methodologies to formulate, analyze, and solve advanced engineering problems.
- Evaluate relevant analytical, computational, engineering tools to address advanced systems engineering problems.
- Solve real-world problems using computer-assisted, data-driven decision making technologies.

If you have questions, please contact COE Grad Admissions at iegradadmission@engr.wisc.edu; Subject Line: IE Grad Admissions and I Sy E Seniors please contact Pam Peterson, prpeterson@wisc.edu.