

Systems Engineering

Administered by the Department of Industrial and Manufacturing Systems Engineering

Systems Engineering Master's Degree

The Systems Engineering Program focuses on developing an individual's analytical skills to design, evaluate, and build modern complex engineered systems. Engineers who can conceptualize, model, and integrate hardware, software, data, and humans are critical in technology driven multi-disciplinary design teams. The Iowa State University Master of Engineering in Systems Engineering Program is designed to train engineers to excel in the technology driven design environment commonly found in developing modern complex engineered systems. The program can be completed on line or in residence, part-time or full-time.

Admission Requirements

Unrestricted admission requires (1) a 3.0 grade point average from an ABET accredited undergraduate engineering program, (2) two years of engineering experience or current full-time employment as an engineer, (3) calculus, engineering statistics, and engineering economy. A GRE is not required for this program.

Applicants for admission to the Systems Engineering Program apply through the Graduate College at Iowa State University. Each applicant must submit:

- Application and application fee
- Official academic transcripts
- Three letters of recommendation
- Resume

Applications should be submitted as early as possible before the beginning of the semester for which admission is sought. Individuals may also take up to 9 credits at Iowa State as a non-degree seeking student and then transfer them to the program when they are admitted.

The Master of Engineering in Systems Engineering Program at Iowa State University is focused on supporting working professionals so teaching or research assistantships typically are not available.

Degree Requirements

Systems Engineering Core (12 credits):

- IE 564 Decision Analysis in Systems Design
- IE 565 Systems Engineering and Analysis
- IE 570 Systems Engineering and Project Management
- IE 585 Requirements Engineering

Supporting Courses (eighteen credits):

Six graduate courses in engineering, science or a related field.

Students working in research and development who are interested in furthering their research skills may select a creative component option as part of their supporting courses.

Iowa State University offers a Systems Engineering Certificate program composed of the core courses and an independent study (IE 590).

Note: Students typically are allowed to transfer up to 6 credit hours of non-ISU graduate credit into their degree program.

Please see the Systems Engineering & Engineering Management Student Handbook for complete information.

Contact Information

Systems Engineering Program Office **Engineering-LAS Online Learning**
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