MS in Industrial Engineering

Degree Requirements

The Master of Science in Industrial Engineering (MS) degree consists of two options: a 30-credit hour research oriented program requiring a thesis or a 30-credit hour application oriented program requiring a project report. The MS Industrial Engineering thesis option curriculum is built upon the choice of a concentration area around which students can mold their overall academic effort including six hours of research. The current focus areas are Data Analytics and Operations Research, Manufacturing and Production Systems, Sustainable Systems Engineering, Service and Supply Chain Systems, and Healthcare and Human-centered Systems. The MS Industrial Engineering project option requires three hours of an approved project advised by a faculty member in lieu of a thesis, and one more course.

Related Degree Options

Master of Engineering

The Master of Engineering (ME) degree is a non-research thirty-six-credit-hour program designed to be a terminal degree. The Master of Engineering (ME) degree is a non-research thirty-six-credit-hour program for U.S. students designed to be a terminal degree. The ME curriculum is based upon a seven-course core with the remaining 15 hours made up of courses appropriate to the student's concentration area.

Dual Master’s Degree Programs: Master of Science and MBA

The Department of Industrial and Manufacturing Systems Engineering, in cooperation with the College of Business, offers a dual master’s degree program for those students who wish to combine the specialized skills of the industrial engineer with the general knowledge of the professional manager. The program was developed in recognition of the fact that solutions to organization problems often require that the engineer's analytical abilities be applied simultaneously with the manager’s integrative perspective. This dual program has been carefully structured to provide the necessary academic background to obtain an MS in industrial engineering and an MBA simultaneously, in a minimum amount of time, usually two academic years.

Master of Science and MHA

The Department of Industrial and Manufacturing Systems Engineering, in cooperation with the health services management program of the School of Medicine, offers a dual master’s degree program to prepare its graduates for careers in the design and administration of health-care delivery systems and organizations. The program was developed in recognition of the highly complex nature of health-care organizations. The program’s basic objective is to fuse competencies in health-service management and in health-systems design. The required courses in the industrial engineering program serve as the area of specialization in the health services management program, and the required courses in the health-services management program are used as electives in the industrial engineering program. As a result, it is possible for the student to earn an MHA in health-services management and an MS in industrial engineering simultaneously.

Application Deadlines

Applications accepted throughout the year.
Fall application deadline: March 1 (Priority deadline: January 1)
Spring application deadline: September 15

Minimum Admission Criteria

- Minimum GPA: 3.0/4.0
- Test of Written English: (TWE) of 4.0 (international applicants only)
- Minimum Academic IELTS OVERALL score: 6.0; or Minimum TOEFL scores:
  - Internet-based test (iBT) 80
  - Paper-based test (PBT) 550
- Minimum GRE scores:
  - When did you take the GRE?  
    - Prior to August 1, 2011: Verbal 350, Quantitative 700  
    - On or After August 1, 2011: Verbal 143, Quantitative 155

- Foreign Language: No foreign language is required in either program.

Required Application Materials

To the Graduate School:
- All required Office of Graduate School documents

To the IMSE Graduate Program:
- 3 letters of recommendation
- Statement of Purpose
- Curriculum Vitae (CV)
- GRE scores

Admission Contact Information
Luis G. Occeña, Interim Director of Graduate Studies
E3437 Thomas and Nell Lafferre Hall
Columbia, MO 65211
(573) 882-2691

TA/RA Hiring

This academic department does not have any function of financial Aid. Rather, IMSE hires TA/RA automatically based on the department needs. No separate application or contacts are necessary; all top ranked applicants will be considered.