INDUSTRIAL ENGINEERING, BS-MS
for the joint degree of Bachelor of Science in Industrial Engineering and Master of Science in Industrial Engineering

The Department offers a combined Bachelor of Science and Master of Science program in Industrial Engineering. This program allows students who wish to earn both degrees to become involved in graduate course work and thesis research during their fourth year of study. It also offers the possibility to earn both degrees on an accelerated schedule. The educational objectives of the combined program are the same as for the individual degrees.

Admission

Formal admission to the combined program normally occurs late in the junior year or early in the senior year. Undergraduate students in IE may apply for formal admission to the combined program with the following provisions:

- Students must have a minimum Illinois GPA of 3.60 or higher, and have earned 96 credit hours towards the B.S.I.E. requirements at the time they are invited to apply.
- A special B.S.-M.S. application is provided to the student with the invitation. This application along with supporting documents must be submitted to the ISE Graduate Programs Office, Room 111 Transportation Building. There are two annual application deadlines: September 15 and January 15.
- GRE scores are not required for admission to the program. However, students are strongly encouraged to take the GRE in their senior year in order, for example, to be eligible for national fellowship competitions.
- Students in the combined program will be recommended by the department for admission to the Graduate College after they complete the 120 hours required for the B.S. portion of the combined program.
- The department will pay the application fee for these students.
- Each student is required to identify a graduate advisor and file a graduate course plan in the semester the student is granted formal admission to the graduate portion of the program.
- Once the student is admitted into the B.S.-M.S. program, the Director of Graduate Programs will act as the student’s advisor until a permanent advisor is found.

Withdrawal

Students may withdraw from the program at any time by notifying the Undergraduate Programs Office. Students who do not meet the Graduate College and departmental requirements for admission to the graduate program at the time they complete the 120-hour B.S. portion of the combined program will be required to leave the program.

Students who withdraw from the program for any reason may continue in the regular four-year B.S. degree program, which currently requires 128 hours, provided they meet the normal GPA requirements of that program. Students who withdraw from the combined program after they have taken courses for graduate credit may petition to have those credits counted toward their undergraduate program requirements.

Continued Graduate Study

Students who complete the combined program may petition to continue in graduate school for a Ph.D. These students will hold the same status (post M.S.) as students entering the Ph.D. program with an M.S. degree, and will be required to take the department’s qualifying examination no later than the second calendar semester after graduation from the combined program.

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Course Requirements

The combined program requires 120 hours of undergraduate credit and 32 hours of graduate credit. This compares to 128 hours of undergraduate credit and 32 hours of graduate credit when the B.S. and M.S. degrees are earned separately. The undergraduate requirements are identical to the four-year B.S. program shown above, except that the following requirements are waived:

- one IE technical elective — 3 hours
- Free electives — 5 hours

In addition, independent study project courses may not be used as IE or technical electives in the B.S. portion of the combined program.

In the M.S. portion of the program, 32 hours of credit and a thesis are required. There must be at least 24 hours of formal graded course work at the 400 level or greater, eight of which must be at the 500 level, and four of the eight must be in the major field. A Master’s thesis, for which at least four and no more than eight hours of IE 599 credit is required.

Students must also register for the graduate seminar course (IE 590) every semester following formal admission into the graduate portion of the program.

A student in the combined program must spend at least two academic years in residence, full time in the combined degree program, and at least one of these years must be with graduate status. Students must maintain a graduate GPA of 3.00 in order to remain in the combined program.

The B.S. and M.S. degrees are granted simultaneously at the end of the program.