

Master of Integrated Manufacturing Systems Engineering



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Program Overview

The Integrated Manufacturing Systems Engineering (IMSEI) Institute was established in 1984. IMSEI provides multidisciplinary graduate-level education and practical training opportunities in the theory and practice of integrated manufacturing systems engineering at the master's level. IMSEI focuses on providing a manufacturing presence and a program environment in the College of Engineering where faculty, graduate students and industry can engage cooperatively in multidisciplinary graduate education, basic and applied research, and technology transfer in areas of common interest related to modern manufacturing systems technology. The objective of the MIMSE program is to offer students with traditional discipline backgrounds in engineering and the physical sciences an opportunity to broaden their understanding of the multidisciplinary area of manufacturing systems. Core areas of concentration are offered in manufacturing systems, logistics, mechatronics, and biomanufacturing.

The Master of Integrated Manufacturing Systems Engineering (MIMSE) distance education program is designed for students with an undergraduate degree in engineering or the physical sciences. It is a 33 credit hour degree program that does not require a thesis or on-campus residency. A final oral examination is required.

Admission Requirements

- Bachelor's degree from an accredited college or university in an engineering or related discipline. The discipline does not have to be engineering but it must have a strong engineering/mathematical curriculum.
- An overall undergraduate GPA of at least 3.0.
- GRE scores are required but may be waived for online students.
- TOEFL or IELTS scores (no more than two years old) for international applicants unless they have completed one year of study at a university in the United States.
- Three letters of recommendation from persons able to comment on the applicant's qualifications for graduate study.
- You can find out more about admission requirements at <https://www.imsei.ncsu.edu/admission/>

Degree Requirements

- Completion of 27 credit hours of graduate courses at the 500 or 700 level with an overall GPA of 3.0 in addition to a research project for 6 hours of credit.
- The general plan of study of the MIMSE degree consists of three components: common core courses (5), concentration electives (4), and a research project.
- All degree requirements must be completed within six years and, except for summer sessions, a student must remain continuously enrolled for a minimum of one course per fall and spring semesters until graduation. A leave of absence can be granted for two semesters with reasonable justification.
- Each candidate must pass a final oral examination at which time one defends the results of his/her research project and submits the technical report that describes the project. This examination can be done in person or by video conference.
- Details can be found at <https://www.imsei.ncsu.edu/academics/curriculum-degree-requirements/>.

Course Registration

It is preferable to seek admission to the MIMSE program as soon as possible to assure integration into the advising process. However, a person does not have to be admitted to a degree program to enroll in an online credit course. Prior to applying to Graduate School, a qualified individual may enroll in Engineering Online courses as a Non-Degree Studies (NDS) student. The NDS classification is designed for individuals who wish to undertake academic work but who are not currently admitted to a degree program. If the student is admitted to the MIMSE program, a maximum of twelve hours taken as a NDS student or from another institution may apply toward the 33 credit hour requirement. Students register for online courses through Engineering Online. Those who wish to take only a few courses and not pursue a degree do not need to apply for formal program admission to NC State University. However, students who wish to earn the MIMSE degree must formally apply for admission to the Graduate School at <https://applygrad.ncsu.edu/apply/>. When completing the online application, please be sure to select the "Distance Track" version of the degree.

To register for an Engineering Online course log into <https://www.webtools.ncsu.edu/engronline/> and submit the registration form. Students cannot register through the University MyPack Portal system for Engineering Online courses.

Course Offerings

A list of distance education courses available for each semester can be found on the Engineering Online website. Full-time employed individuals may only enroll in two online courses per semester. It is highly recommended that new students enroll in only one course during their first semester.

For a list of distance education courses approved for the fall, spring or summer semester, visit the Engineering Online web site at <https://www.engineeringonline.ncsu.edu/apply-and-enroll/online-courses/>.

Course Logistics

Online courses are the same as on campus courses in terms of content, requirements and academic rigor. On-campus class lectures are captured, digitized and placed on the Internet for distance students to access at any time and from any location. Students must, however, follow the on-campus class schedule in terms of submitting homework and taking exams. Course assignments, lecture notes, and handouts are made available to distance students on the course website. All in-class exams must be proctored.

Contact Information

- For more information about the MIMSE program available online, contact:

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Integrated Manufacturing Systems Engineering Institute
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Email: steve_jackson@ncsu.edu
Department website: <https://www.imsei.ncsu.edu/>

- For more information about the registration process, course offerings and course logistics, contact:

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EOL web site: <https://engineeringonline.ncsu.edu>