

Undergraduate/Graduate Degree in ISE

The Grado Department of Industrial and Systems Engineering has a strong and diverse master's program that provides opportunities for study in specific areas in industrial and systems engineering, as well as general master's study. For well qualified students in a bachelors degree program at Virginia Tech the department offers the opportunity to begin the master's degree coursework in the final year of bachelor's studies. Both thesis and non-thesis tracks are available for all students. Master's graduates can select a plan that leads to advanced study at the PhD level, or one that prepares them to challenging positions in the public or private sectors.

Prospective M.S. students should have a strong academic background that is commensurate with their desired field of study within the department. Students can select one of four general focus areas for their graduate study - human factors and ergonomics, management systems, manufacturing systems, or operations research or they can select the industrial engineering option, which provides more flexibility in tailoring their study.

Policies for the Undergraduate/Graduate Degree in ISE

Admissions Requirements for UG/G program in ISE

- Minimum 3.4 GPA in last 60 hours of bachelor's coursework completed
- Official GRE scores
- Statement of purpose, including career objectives
- CV/Resume
- 3 letters of reference
- Transcripts, including official transcripts of all non VT coursework

Applicants must be in the last 12 months of their undergraduate degree and must be accepted into the program prior to the beginning of the semester in which they would enroll in courses to be used in the UG/G program.

Bachelor's degree students from ISE as well as all other College of Engineering programs at Virginia Tech, Psychology, Business, Statistics, Industrial Design, and a variety of bachelor's degree backgrounds are encouraged to apply to the UG/G program in ISE. The ISE department will consider all qualified applications.

At the time of admission to the UG/G program an advisor will be assigned unless there is already a student/faculty informal relationship. Students are free to change advisors once they begin the program if they identify a faculty member that is more suited to their interest than that of the initially assigned advisor.

UG/G Thesis Option:

Students admitted to the UG/G in ISE under the thesis option are required to complete research in the course of graduate study. To initiate the research effort the student is required to prepare a research proposal that describes the content of the research, the outcome anticipated, the contribution to the field of endeavor, and the creative content of the effort. This proposal must be in written form and must be presented to his/her advisory committee at a meeting where all committee members are present. Thesis research leading to the M.S. degree should represent an original contribution to the student's field of interest.

UG/G Non-Thesis Option:

The non-thesis option is a coursework only MS degree. Once all grades for the required coursework have been verified the degree will be awarded.

Additional Program Requirements

- A maximum of 9 hours may be double-counted, none of which can include required undergraduate classes.
- No more than six credits double counted may be at the 4XXX level.
- Conjoint classes, to double count, must be taken at the 5XXX level.
- A grade of "B" or better must be earned in each course to be double counted.
- Courses must not be taken pass-fail if a graded option is available.

Questions on the UG/G program in ISE or any other graduate programs in ISE should be directed to the ISE Graduate Program Office.

**ISE Graduate Program Office
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