PhD in Industrial Engineering

Admission Requirements
Following are the minimum requirements for admission to the PhD in Industrial Engineering program.

1. Applicants whose native language is not English must submit official, acceptable scores for either the TOEFL, the Academic Module of the IELTS examination, or the PTE-Academic test. Please visit the Graduate School website (http://wichita.edu/gradschool), to check English proficiency requirements;
2. Submission of official GRE scores is required;
3. Applicants must have (or be nearing the completion of) a master’s degree in engineering, physical science, or other related disciplines with a minimum cumulative GPA of 3.250 (on a 4.000 point scale) in all graduate coursework;
4. A statement of purpose indicating applicant's research interests, and evidence of the ability to carry out independent research and present it in written English is highly desirable;
5. Submission of two letters of recommendation; and
6. Prerequisites:
   a. Completion of the following or equivalent courses:
      | Course       | Title                            | Hours |
      |--------------|----------------------------------|-------|
      | IME 255      | Engineering Economy              | 3     |
      | MATH 344     | Calculus III (students deficient in this are considered for admission only in nondegree status) | 3     |
      |              | A natural science course equivalent to that of the undergraduate engineering requirement | |
   b. Programming competence in at least one of the following languages: C, C++, or Visual BASIC.

Direct Admission of BS Graduates in Industrial Engineering
The department of industrial, systems and manufacturing engineering (ISME) offers direct admission for truly exceptional students to its PhD program. Applicants must have consistent and exceptional credentials throughout all their academic career, including:

- An undergraduate degree in engineering, physical science, or other related discipline;
- A minimum GPA of 3.500, on a 4.000 scale, during the final 60 credit hours of coursework; and
- A letter of endorsement for admission from an ISME graduate faculty member. (This requirement reflects the willingness of an ISME graduate faculty member to serve as the research advisor for the applicant upon admission.)

All other minimum requirements for admission into the PhD in Industrial Engineering program must be met.

Program Requirements
1. Course Distribution: Total credit hours = minimum of 84 credit hours
   Graduate Coursework: at least 60 credit hours; 60 percent of the PhD courses beyond the master’s degree (including dissertation) must be at the 800 or higher level, and 60 percent of all graduate courses (including dissertation) must be at the 700 or higher level.
   Dissertation
   Select at least 24 credit hours in dissertation
   Required Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>IME 724</td>
<td>Statistical Methods for Engineers</td>
<td>3</td>
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2. Advisor, Advisory Committee and Plan of Study: Before completing 12 PhD credit hours at WSU, a student must select an advisor and an advisory committee. With the help of the advisor, the student must prepare a plan of study that needs to be approved by the advisory committee, graduate coordinator and Graduate School before the preliminary and comprehensive exam is attempted. For details of the preliminary examination, please refer to the ISME website.

3. Preliminary examination: Before completing 18 PhD hours at WSU, a student must pass the preliminary examination administered by the department in at most two attempts. Students who cannot pass the preliminary exam in 1.5 years will be dismissed from the PhD program.

4. Comprehensive examinations: Must pass the comprehensive examinations covering the major and minor areas. A student may attempt these exams no more than twice in each area. A student can enroll in dissertation hours only after passing the comprehensive exams.

5. Dissertation approval examination: Prepare a dissertation research proposal and pass an oral examination of the proposal. A student cannot attempt the examination more than twice. A student must be continuously enrolled in IME 976 after the dissertation approval examination.


7. Time limits and residency requirement: From the time the student is admitted to the program, no more than six years may elapse until requirements for the degree have been completed.

8. Transfer of credit from another university: (Check the transfer rules in the Graduate Catalog.) Up to 12 credit hours may be transferred from another accredited graduate school.

9. Professional and scholarly integrity training requirement: Must complete professional and scholarly integrity training requirement, preferably during the first semester of the program.

Note: minor and MATH/STAT hours must add to at least 18 credit hours.