DOCTOR OF PHILOSOPHY IN
INDUSTRIAL ENGINEERING

A Master's degree is not required for admission to the Direct Ph.D. program.

The 96 graduate hours of credit may be divided into three stages of 32 hours each, consisting of 32 hours generally represented by an M.S. degree or equivalent (Stage I), 32 hours of course work beyond the M.S. degree (Stage II), and 32 hours of thesis work for the doctoral thesis (Stage III). Stage I requirements are satisfied by completion of an M.S. degree in the Department or in a related engineering or technical discipline from the University of Illinois or other accredited university. A non-technical M.S. or MBA would normally not count toward the completion of Stage I. Such students would be required to enroll in one of the Master of Science Programs in the Department and satisfy the requirements therein in order to satisfy Stage I of the Ph.D. degree.

To advance to Stage II all students must pass the Qualifying Examination. To advance from Stage II to Stage III the student must pass the Preliminary Exam. Stage III is comprised of a minimum of 32 hours of IE 599 (Thesis Research) credit and a written dissertation followed by a final oral thesis defense.

The Preliminary Examination is taken after the Qualifying Examination. A minimum of six months must elapse between the successful completion of the doctoral preliminary examination and the doctoral final examination (oral dissertation defense).

### Entering with approved M.S./M.A. degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE 599</td>
<td>Thesis Research (min-max applied toward the degree)</td>
<td>32</td>
</tr>
<tr>
<td>IE 590</td>
<td>Seminar (registration for 0 hours every term while in residence)</td>
<td>0</td>
</tr>
<tr>
<td>Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)</td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 64

### Other Requirements and Conditions

Other Requirements and Conditions may overlap

Minimum 500-level Hours Required: 16

A maximum of 4 hours of IE 597 (or other approved independent study) may be applied toward the elective course work requirement.

4 hours of the elective courses must be from a College of Engineering department, including ABE and CHBE.

A maximum of 4 CR-graded credit hours in non-IE courses may be applied toward the degree.

### Entering with approved B.S./B.A. degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE 599</td>
<td>Thesis Research (min-max applied toward the degree)</td>
<td>40</td>
</tr>
<tr>
<td>IE 590</td>
<td>Seminar (registration for 0 hours every term while in residence)</td>
<td>0</td>
</tr>
<tr>
<td>Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 96

### Other Requirements and Conditions

Other Requirements and Conditions may overlap

Minimum 500-level Hours Required: 24

For the thesis option, a maximum of 4 hours of IE 597 (or other approved independent study) may be applied toward the elective course work requirement.

4 hours of the elective courses must be from a College of Engineering department, including ABE and CHBE.

A maximum of 4 CR-graded credit hours in non-IE courses may be applied toward the degree.

### Qualifying exam:

Qualifying examinations should be taken as early as possible

### Preliminary exam

Final exam or dissertation defense

### Dissertation deposit

Minimum GPA: 3.0

1 For additional details and requirements refer to the department's Graduate Programs Web site (http://ise.illinois.edu/graduate) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook).

2 Qualifying Exam Information (http://ise.illinois.edu/graduate/quals-prelims-final-exams.html)
2 Doctor of Philosophy in Industrial Engineering

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