

# Industrial and Manufacturing Engineering Doctorate

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## Department Information

- **Department Web Site:**  
ndsu.edu/ime/ (<http://ndsu.edu/ime/>)
- **Application Deadline:**  
March 1 is the priority fall deadline for funding consideration; August 15 for spring and summer. Domestic applications due one month prior to start of semester.
- **Credential Offered:**  
Ph.D.
- **Test Requirement:**  
GRE
- **English Proficiency Requirements:**  
TOEFL ibt 71; IELTS 6.0; Duolingo 105
- **Program Overview:**  
[ndsu.edu/programs/graduate/industrial-and-manufacturing-engineering](http://ndsu.edu/programs/graduate/industrial-and-manufacturing-engineering/) (<http://ndsu.edu/programs/graduate/industrial-and-manufacturing-engineering/>)

**Apply Now ([https://ndsugrad.my.site.com/Application/TX\\_SiteLogin/?startURL=/Application/TargetX\\_Portal\\_\\_PB](https://ndsugrad.my.site.com/Application/TX_SiteLogin/?startURL=/Application/TargetX_Portal__PB))**

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The Doctor of Philosophy degree requires 60 credits beyond the M.S. requirement (90 credits total).

For students who are enrolled with a M.S. degree, the course credit requirements *beyond the M.S.* degree are:

- A minimum of 15 credits from *didactic IME courses* (IME 601-689 and 700-789), with at least 9 credits from 700-level IME courses. If courses are not offered in a timeline that meet the students' requirements, it is possible for waiver/substitution requests.
- A minimum of 12 credits of *other courses* are required. This part of the course credits may come from approved graduate level courses of other departments.
- A minimum 3 credits of *Graduate Seminar* (IME 790).
- A minimum of 30 credits of *dissertation* (IME 899).
- Prior to graduation, all Ph.D. graduate students are required to have submitted two papers that have been accepted by refereed journal or refereed conference. The submitted papers are expected to be based on their dissertation research.

For students who are enrolled with a bachelor's degree, the course credit requirements are:

- A minimum of 30 credits from *didactic IME courses* (IME 601-689 and 700-789), with at least 9 credits from 700-level IME courses. If courses are not offered in a timeline that meet the students' requirements, it is possible for waiver/substitution requests.
- A minimum of 27 credits of *other courses* are required. This part of the course credits may come from approved graduate level courses of other departments.
- Among these 57 course credits, at least 30 of them must be 700-level courses. For example, if a student opts for 9 credits of 700-level IME courses, they are required to enroll in a minimum of 21 credits of 700-level courses offered by other departments.
- A minimum 3 credits of *Graduate Seminar* (IME 790).
- A minimum of 30 credits of *dissertation* (IME 899).
- Prior to graduation, all Ph.D. graduate students are required to have submitted two papers that have been accepted by refereed journal or refereed conference. The submitted papers are expected to be based on their thesis or dissertation research.

\*For either the M.S. or Ph.D., all courses taken outside of the IME Department must be approved in advance by the student's academic adviser.

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## Admission and Application Requirements

- Graduate School admission and application requirements are found on the Admission Information (<http://catalog.ndsu.edu/graduate/admission-information/>) page.

- In addition, this program requires applicants to submit a GRE score that meets the following requirements:
  - 310 or higher (Verbal + Quantitative), 160 Quantitative minimum and Analytical Writing score of 3.5 or better
- International students must also meet the following English proficiency requirements:
  - Minimums for admission: TOEFL: 71 IELTS: 6.0 Duolingo: 105
  - Minimums for TA Graders: TOEFL: 79 IELTS: 6.5 Duolingo: 110
  - Minimums for TA Instructors: TOEFL: 81 IELTS: 7.0 Duolingo: 115