MECHANICAL ENGINEERING (PH.D.)

Admission Requirements

Admission to this program is contingent upon admission to the Graduate School (http://bulletins.wayne.edu/graduate/general-information/admission). It is required that applicants submit Graduate Record Examination (GRE) scores. In addition, applicants must have a graduate grade point average of 3.5 or above and must have completed an undergraduate major or substantial specialized work in his/her proposed doctoral major field. Students with an undergraduate grade point average of 3.5 or above may apply for direct admission to the Ph.D. program; students with less than a 3.5 undergraduate g.p.a. must complete a master’s degree program in mechanical engineering prior to consideration for admission to a Ph.D. program.

A minimum of ninety semester credits beyond the baccalaureate degree must be earned in the Ph.D. program. The thirty credit dissertation registration requirement is fulfilled by registering for the courses ME 9991, ME 9992, ME 9993, and ME 9994 (Doctoral Dissertation Research and Direction I, II, III, and IV, respectively), in consecutive academic year semesters. In addition, at least half of all course work credit exclusive of dissertation credits must be earned in the Department of Mechanical Engineering. All course work must be completed in accordance with the regulations of the Graduate School (http://bulletins.wayne.edu/graduate/general-information/academic-regulations) and the College of Engineering (http://bulletins.wayne.edu/graduate/college-engineering/academic-regulations).

Requirements For All Ph.D. Students

1. **Preliminary Qualifying Examination:** This is a three-part written examination administered once per year. All Ph.D. applicants must pass this examination within three semesters after admission to the Ph.D. program. Students must choose to be examined in any three of the following fields:
   a. Controls
   b. Dynamics
   c. Vibrations
   d. Fluid Mechanics
   e. Solid Mechanics
   f. Thermodynamics
   g. Heat and Mass Transfer
   Each student has two chances to pass this examination. Students must register their choice of fields with the Director of Graduate Studies at least thirty days prior to the examination date.

2. **Final Qualifying Examination:** This examination consists of written and oral parts covering the student’s major and minor areas and other related fields. The student is expected to take this examination before registering for ME 9991.

3. **An approved Plan of Work** should be filed with the Office for Graduate Studies.

4. **A Doctoral Dissertation Outline,** approved by all members of the Doctoral Committee and the Departmental Graduate Program Committee should be filed by the student immediately after completing the oral part of the Final Qualifying Examination.

For additional information, students should consult the Graduate School’s regulations (http://bulletins.wayne.edu/graduate/general-information/degree-certificate-requirements/#doctoraldegreesphdtext) governing doctoral study.