

MECHANICAL ENGINEERING (PHD)

Doctor of Philosophy in Mechanical Engineering

Unit: Speed School of Engineering (<http://engineering.louisville.edu>) (GS)

Department: Mechanical Engineering (<https://engineering.louisville.edu/academics/departments/mechanical/>)

Academic Plan Code(s): ME_ _PHD

Program Information

The PhD degree program is intended for persons having an accredited master's and/or baccalaureate degree in mechanical engineering but is available to those with other related backgrounds. Applicants with other backgrounds may need to take some undergraduate coursework to meet pre-requisites for graduate courses or to facilitate conducting dissertation research as directed by the primary research mentor. Students interested in the PhD degree program should consult the Director of Graduate Studies in the Department of Mechanical Engineering.

Degree Requirements

The award of a Doctor of Philosophy degree indicates that a student has attained mastery of a field and has demonstrated the capacity to perform independent scholarly research. Candidates for the Doctor of Philosophy degree must have a minimum final cumulative grade point average of 3.00 for all academic coursework attempted in Graduate Studies.

The requirements for the Doctor of Philosophy degree are explained in more detail in the Degree Requirements section (<https://catalog.louisville.edu/graduate/general-policies-procedures-requirements/degree-requirements/>) of this catalog.

Admission Standards

The admission standards for the PhD program in mechanical engineering are as follows:

- All admission applications for the program shall include:
 - A completed graduate application (<http://louisville.edu/graduate/futurestudents/apply-materials/application/>) for the Graduate School,
 - An application fee,
 - Results from the Graduate Record Examination (GRE),
 - At least two letters of recommendation, and
 - Official transcript(s) for all previous post-secondary coursework. All transcripts not in English must be certified as authentic and translated verbatim into English.
- The minimum requirement for admission is a baccalaureate degree or its equivalent from an accredited institution or current enrollment in an undergraduate Speed School program.
- The successful applicant will typically have an undergraduate grade point average of 3.00 or above and a graduate grade point average of 3.25 or above (on a 4.0 scale) if previous graduate course credits are to be applied toward doctoral degree requirements.
- The successful applicant will typically have a GRE Combined Verbal and Quantitative Reasoning score of 302 or above.
- International students whose primary language is not English must show English language proficiency by either TOEFL/IELTS/Duolingo

score or demonstration of a degree awarded from an acceptable English language institution. The successful applicant will typically have a TOEFL score of 79 or higher or overall IELTS score of 6.5 or higher or a Duolingo score of 105 or higher.

Program Requirements

Normally, it is expected that the student will complete a master's degree before being admitted to the PhD program. However, qualified applicants may be admitted directly to the doctoral program after receiving a baccalaureate degree. These students will be required to complete an additional 30 credit hours of coursework at the 500 and 600 level under an individual plan developed in conjunction with their primary dissertation research mentor and the department's Director of Graduate Studies.

The minimum curricular requirements for the doctoral program are:

Code	Title	Hours
Master's Degree or Approved Master's-Level Course Work		30
Technical Electives ¹		15
ME 700	Dissertation Research in Mechanical Engineering	15
Minimum Total Hours		60

Candidates for the doctor of philosophy degree must have a minimum final cumulative grade point average of 3.00 for all academic work attempted in graduate studies.

¹ Technical Electives can be ME or non-ME courses. Technical Electives must be approved by the department. Students are allowed to take at most six (6) credit hours of Independent Study (ME 588/ME 688) as part of the coursework credit hours.