# ENGINEERING (MECHANICAL ENGINEERING) - DOCTOR OF PHILOSOPHY

## Requirements for Ph.D. Degree

The student's academic program is not judged satisfactory unless it prepares the student to contribute to the advancement of knowledge in the field of Mechanical Engineering. The Degree of Doctor of Philosophy is indicative of distinguished achievement in the areas of scholarship and original research. Therefore, a dissertation of high quality is required of all doctoral students in Mechanical Engineering.

The Ph.D. program is open to students with a master's degree. Exceptionally well qualified students may petition for direct entry to the Ph.D. program without first obtaining a master's degree.

A student is required to have one refereed journal paper accepted and a second one accepted or in review by graduation. The Ph.D. dissertation can be a compilation and reformatted version of these published or accepted journal papers. Exceptions may be made on case by case basis by the Department Head.

Prefix	Title	Credits
Pass Qualifying Exam	1	
Graduate Coursework	(Credits beyond the Bachelor's Degree) <sup>2</sup>	36
Pass Comprehensive Exam <sup>3</sup>		
Doctoral Dissertation <sup>4</sup>		24
M E 700	Doctoral Dissertation	
Complete and Defend Doctoral Dissertation		
Total Credits		60

- It is expected that students will take the qualifying exam within one year of entering the Ph.D. program.
- At least 18 of graduate coursework must support the student's research. The program of study may include up to 6 credits of M E 510 (special topics courses offered formally on a one-time basis) with the approval of the Graduate Coordinator.
- The candidate must pass a comprehensive examination after the completion of adequate coursework and demonstration of satisfactory progress toward the doctoral dissertation. The specific format of the exam is at the discretion of the examination committee. The candidate may submit the proposal for the dissertation research that includes the candidate's current research, planned research directions, and a reasonable timeline for completing the candidate's proposed research if the committee requires.
- This may include a maximum of 6 credit hours of M E 600 (https://catalogs.nmsu.edu/search/?P=M%20E%20600) Doctoral Research. M E 600 (https://catalogs.nmsu.edu/search/?P=M%20E%20600) Doctoral Research is intended for those students who have not completed the qualification examination, a prerequisite for M E 700 (https://catalogs.nmsu.edu/search/?P=M%20E%20700) Doctoral Dissertation.

### **Admission Requirements**

For PhD Program, the Mechanical and Aerospace Engineering department asks for the following documents: Transcript, Three Recommendation Letters, Statement of Purpose, Resume, Writing Sample, and GRE.

Also NMSU requires English Proficiency Tests such as TOEFL, IELTS, or Duolingo English Test for international students.

### Ph.D. Program Transfer Credits

A student who has completed a Master of Science degree in M E, A E, or a closely related field may transfer up to 24 credits of graduate coursework, approved by the student's advisor, into a Ph.D. program of study.

### Selection of Permanent Ph.D. Advisor

Newly admitted graduate students will be assigned a temporary advisor for the first semester. The student must select a permanent advisor before registering for the second semester. In selecting a permanent advisor, the student should arrange to meet with several members of the graduate faculty during the first six weeks of enrollment to discuss specific objectives. The student should use these meetings to become familiar with faculty research interests and research projects currently in progress. The faculty member must consent (in writing) to serve as the student's advisor.

Policies governing the Ph.D. written Qualifying Examination, the Ph.D. written and oral comprehensive examination, the student's Ph.D. committee, and the Ph.D. dissertation are contained in the department's Graduate Program website.

# **Additional Requirements**

Ph.D. candidates in the College of Engineering, who have successfully completed their Ph.D. Qualifying Examination after January 1, 2018, must satisfy a publication requirement which requires two papers:

Paper #1: An archival paper accepted or published in any journal listed in the source publication list for the Web of Science, or a refereed Journal or Conference Proceeding approved by the student's doctoral committee and the cognizant Department Head(s), before the Doctorate of Philosophy final examination. The candidate should be listed as the lead author in Paper #1.

Paper #2: An additional archival paper submitted, accepted, or published in any journal listed in the source publication list for the Web of Science. Alternatively, one conference paper accepted or published in a national or international conference proceedings.