

**DOCTOR OF PHILOSOPHY WITH MAJOR IN MECHANICAL  
ENGINEERING (Ph.D.)**

The degree of Doctor of Philosophy in Mechanical Engineering is conferred by the University primarily in recognition of a demonstrated ability for independent and original research in the discipline. This ability must be supported by a comprehensive and coordinated plan of advanced study designed to provide a strong background in the fundamentals of Mechanical Engineering and related areas.

**Mission**

The mission of the Department of Mechanical Engineering is to provide students with the fundamental background necessary for advanced work in industry, and/or a career in higher education; to conduct advanced research in their area of specialty; and to provide service to the engineering profession and to the community.

**Educational Outcomes**

Upon graduation, students will be able to:

1. Perform original research in their area of specialty.
2. Demonstrate an advanced level of knowledge in mathematics and engineering fundamentals relevant to their discipline.
3. Effectively communicate an advanced technical concept to their peers.

**Admission to Doctoral Study**

Minimum requirements for admission to doctoral studies in Mechanical Engineering are as follows:

1. The student must have a baccalaureate in engineering or a related field from a recognized institution.
2. The student must have an average of "B" or better in the last 60 semester hours of work attempted.
3. The student must have a combined score of 1000 or higher on the verbal and quantitative section of the Graduate Record Exam.

4. The student must demonstrate proficiency in both written and spoken English. A student from a non-English speaking country is required to take the test of English as a Foreign Language (TOEFL) and achieve a score of at least 550.
5. Three letters of reference attesting to the student's potential for graduate studies in Mechanical Engineering.
6. The student must obtain the approval of the Department of Mechanical Engineering. Usually, an applicant admitted will have a strong record of achievement which exceeds the minimum requirements. It is anticipated almost every applicant will already have a Master's degree, but it is not an absolute requirement. Approval for admission by the Department will be based on an evaluation of the student's record in terms of likelihood of success in the Ph.D. program.

NOTE: *Admission to doctoral studies does not constitute admission to candidacy for the degree.*

### **Admission to Doctoral Status**

Admission to doctoral status is granted after the student has:

1. Successfully completed the Department's Qualifying Examination,
2. Been accepted by a Department faculty member willing to serve as his/her dissertation advisor, and
3. Had his/her plan of course work approved by his/her Advisor, by the Department Graduate Coordinator, and by the Dean of Graduate Studies and Research.

### **Admission to Candidacy**

Admission to candidacy requires formulation of a Supervisory Committee approved by the Department Graduate Coordinator as well as successful completion of the Qualifying Examination.

### **Degree Requirements**

A central requirement for the Ph.D degree in Mechanical Engineering is submission and defense of dissertation based upon original research in an area of specialization acceptable to the student's Supervisory Committee. The completed dissertation must be approved by the Committee, the Department Chair, and the Dean of Graduate Studies and Research.

Additional requirements are:

1. A minimum of 51 semester hours of course work beyond the Baccalaureate Degree, or 21 semester hours beyond the Master of Science degree,
2. Doctoral thesis research of not less than 33 semester hours, and

3. Satisfaction of all University regulations and requirements for the Ph.D. degree.

**Residency Requirement**

Students are required to spend two semesters of full-time study beyond the Master's degree in residence at Florida Atlantic University.

**Transfer Credit**

A maximum of 12 semester hours beyond the Master's degree can be transferred into the student's program of study.

**Time Limits**

No credit that is more than seven years old at the time a graduate degree is awarded may be counted toward that degree at Florida Atlantic University. In addition, the Final Examination must be completed within five calendar years of the Admission to Candidacy; otherwise, the Qualifying Examination must be repeated.