

# AEROSPACE AND MECHANICAL ENGINEERING DOCTORAL PROGRAMS

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The degree of Philosophical Doctor (Ph.D.) in aerospace or mechanical engineering emphasizes an advanced study and research experience that is particularly suited to prepare students for research careers in industry or government and for positions in academia. To be eligible for the program, a student must have been admitted into the Ph.D. program. The student must then identify an appropriate research area and must be accepted as a Ph.D. student by a member of the AME graduate faculty. A general exam and a dissertation defense at the end of the research program assures that the student meets the high standards of this terminal degree.

## curriculum

The program requires satisfactory completion of at least 42 course credit hours beyond the baccalaureate degree for a total of 90 credit hours and the completion of an original research dissertation.

- 24+ hours Advanced engineering graduate courses at the 5000-level or higher as determined by the student's doctoral advisory conference
- 3+ hours graduate-level math-related coursework<sup>1</sup>
- 3+ hours Graduate-level math-related or science coursework<sup>1</sup>
- Additional coursework as needed to reach 42 hours.
  - Students enrolled in the thermal science program are required to take: AME 5333, AME 5803, AME 5973
- 42+ hours Dissertation Research AME 6980

Students may include up to 42 credit hours from previous graduate work as follows:

- All of an M.S. degree up to 30 hours but including no more than 6 thesis hours
- All of a M.S. non-thesis degree up to 36 hours
- Up to 12 hours of post-master's work

A maximum of 9 credit hours of Special Projects, Guided Individual Studies, or other non-competitively graded courses (including 6 credit hours of MS thesis) may be included.

The dissertation advisory committee should be formed and the advisory conference should be held no later than the student's second semester of enrollment. The Graduate Liaison should be alerted to this conference. In AME, the Qualifying Exam is combined with the General Exam. The Dissertation Defense takes place after the completion of the research work. Additional details on these procedures and required examinations is provided on the AME website.