MECHANICAL ENGINEERING, PH.D.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement	Detail
Minimum Credit Requirement	60 credits
Minimum Residence Credit Requirement	32 credits
Minimum Graduate Coursework Requirement	30 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) Requirement Policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/)
Overall Graduate GPA Requirement	3.25 GPA required.
Other Grade Requirements	Students must earn a C or above in all formal coursework. Ph.D. candidates may not have any more than two Incompletes on their record at any one time.
Assessments and Examinations	The Ph.D. candidate will need to pass a qualifying exam, preliminary exam, and a final defense in order to obtain a degree.
Language Requirements	No language requirements.
Graduate School Breadth Requirement	All doctoral students are required to complete a doctoral minor or graduate/professional certificate. Students should select one of the following options: • Option A (External Minor): Fulfillment of this minor requires approval of the doctoral minor program. This minor must be outside of the student's doctoral major program. • Option B (Distributed Minor): Fulfillment of this minor requires 12 course credits. The coursework should form a coherent group of courses for which graduate credit is allowed. The approval of the faculty advisor and ME Graduate Committee is required. • Option C (Graduate/Professional Certificate): Fulfillment of this option requires successful completion of a Graduate/Professional certificate in a program outside of the student's doctoral major program.

REQUIRED COURSES

Two semesters of M E 903 Graduate Seminar are required. These should be taken the first two semester the student is in residence. If an M.S. degree is received at UW–Madison, additional M E 903 credits are not required.

A minimum of 42 formal course credits beyond the B.S. degree. This includes a minimum of 15 credits (usually five courses) numbered 700 or higher (excluding M E 964 Special Advanced Topics in Mechanical Engineering courses unless specifically approved). 12 credits (usually four courses) numbered 700 and above must be taken at UW–Madison. A minimum of 6 credits (usually two courses) numbered 700 and above must be in Mechanical Engineering (M E) and/or Engineering Mechanics (E M A) taken at UW–Madison. A minimum of one (3 or more - credit) math course. The following courses would satisfy the math course requirement:

Code	Title	Credits
M E 601	Special Topics in Mechanical Engineering (Topic "Computational Math w/Engr Apps")	
M E 964	Special Advanced Topics in Mechanical Engineering (Topics: "App & Comp Math w/ Eng Apps" OR "Comp Math with Apps in Eng" OR "Sci Computing for Apps in Eng")	
E M A/E P 476	Introduction to Scientific Computing for Engineering Physics	
E M A/E P 547	Engineering Analysis I	
E M A/E P 548	Engineering Analysis II	
MATH 321	Applied Mathematical Analysis	
MATH 322	Applied Mathematical Analysis	
400 and above Math Department courses		

400 and above Statistics Department courses	
Graduate "transfer credits" equivalent to the above	

Acceptable courses for the remainder of the required 42 formal course credits (this total includes the courses taken for the PhD breadth requirement) are those numbered 400 and above. Up to two 300 and above courses in engineering, math, or the sciences taken at UW-Madison can also be used towards the formal course credit requirement. The 300 and above courses can be from Mechanical Engineering and/or Engineering Mechanics if approved by the student's advisor and the ME graduate committee.

Minimum of 18 thesis credits (M E 790 Master's Research and Thesis, M E 890 PhD Research and Thesis, M E 990 Dissertator Research and Thesis) are required with an overall grade of S.