MINIMUM GRADUATE RESIDENCE CREDIT REQUIREMENT
16 credits

MINIMUM GRADUATE COURSEWORK (50%) REQUIREMENT
15 of the required 30 credits must be in graduate-level coursework from EMA, math, physics, computer science, or any other engineering department except EPD; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle).

PRIOR COURSEWORK REQUIREMENTS: GRADUATE WORK FROM OTHER INSTITUTIONS
With program approval, students are allowed to count no more than 6 credits of graduate coursework from other institutions toward the minimum graduate degree credit requirement and the minimum graduate coursework (50%) requirement. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

PRIOR COURSEWORK REQUIREMENTS: UW–MADISON UNDERGRADUATE
With faculty approval, students who have received their undergraduate degree from UW–Madison may apply up to 7 credits numbered 400 or above toward the minimum graduate degree credit requirement. This work would not be allowed to count toward the 50% graduate coursework minimum unless taken at the 700 level or above. No credits can be counted toward the minimum graduate residence credit requirement. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

PRIOR COURSEWORK REQUIREMENTS: UW–MADISON UNIVERSITY SPECIAL
With program approval, students are allowed to count up to 15 credits of coursework numbered 400 or above taken as a UW–Madison Special student toward the minimum graduate residence credit requirement, and the minimum graduate degree credit requirement. UW–Madison coursework taken as a University Special student would not be allowed to count toward the 50% graduate coursework minimum unless taken at the 700 level or above. coursework earned five or more years prior to admission to a master's is not allowed to satisfy requirements.

CREDITS PER TERM ALLOWED
15 credits

PROGRAM-SPECIFIC COURSES REQUIRED
Program of study must include: At least 15 credits of EMA courses in the 500 level or above; at least 6 of these 15 credits being in 700-level or above EMA courses; combined EMA course content of the student's
undergraduate and graduate program of study must include at least 24 credits of 500-level or above mechanics coursework.

With thesis: a maximum of 12 credits of EMA 790 Master’s Research and Thesis may be granted for the thesis.

Without thesis: a maximum of 12 credits of EMA 690 Master’s Research may be counted toward the M.S. requirements.

**OVERALL GRADUATE GPA REQUIREMENT**
3.00 GPA required

**OTHER GRADE REQUIREMENTS**
A course that is to be counted toward the M.S. degree must be passed with a grade of A, AB, or B.

**PROBATION POLICY**
A semester GPA below 3.0 will result in the student being placed on academic probation. If a semester GPA of 3.0 is not attained during the subsequent semester of full time enrollment (or 12 credits of enrollment if enrolled part-time) the student may be dismissed from the program or allowed to continue for one additional semester based on advisor appeal to the Graduate School.

**ADVISOR / COMMITTEE**
All students are required to meet with his or her advisor prior to registration every semester.

**ASSESSMENTS AND EXAMINATIONS**
Students who complete a thesis must defend it orally in front of a committee of three faculty.

**TIME CONSTRAINTS**
Students with a B.S. degree in engineering mechanics or equivalent are typically expected to complete the master of science in three semesters. Students with non–EM backgrounds will typically be permitted four semesters to complete their master's degree if more than 27 credits are required.

**LANGUAGE REQUIREMENTS**
No language requirements.

**ADMISSIONS**
The Graduate School sets minimum requirements for admissions (https://grad.wisc.edu/admissions/requirements). Academic program admission requirements are often more rigorous than those set by the Graduate School. Please check the program’s website for details.

**LEARNING OUTCOMES**

**KNOWLEDGE AND SKILLS**
- demonstrate a strong understanding of mathematical, scientific, and engineering principles in the field.
- demonstrate an ability to formulate, analyze, and solve advanced engineering problems.
- demonstrate creative, independent problem solving skills.
- apply the latest scientific and technological advancements, advanced techniques, and modern engineering tools to these problems.

**PROFESSIONAL CONDUCT**
- recognize and apply principles of ethical and professional conduct.

**PEOPLE**

**Faculty:** Professors T. Allen, Blanchard (chair), Bisognano, Bonazza, Crone, Drugan, Fonck, Hegna, Henderson, Kammer, Kulcinski, Lakes, Moses, Pfothenauer, Plesha, Smith, Sovinec, Waleffe, Wilson; Associate Professors M. Allen, Witt; Assistant Professor Schmitz; Affiliate Professors Bednarz, Bier, Deluca, Graham, Ma, Mackie, Miller, Morgan, Nellis, Porter, Robertson, Szlufarska, Thomadsen, Trujillo, Vanderby