Department of Mechanical Engineering

Program Type:\* 

Degree Type:\* 

Provide a brief summary of the proposed program changes and describe the rationale for the change(s):

Summary:

The two existing MEEG Masters programs —Masters of Science in Mechanical Engineering (MSME) and Masters of Engineering Mechanical (MEM)— are merged into one, the MSME.  (The MEM program will be deactivated.)  While the original MSME required a thesis and MEM was strictly course based, the proposed one offers the thesis as an option toward completing the required credits for the degree.  Students taking the non-thesis option can also be involved in research through a maximum of 6 credits of Graduate Research or Independent Study, but there is no “capstone” requirement for that option.  On the other hand, based on the existing rules for the PhD program, students taking the thesis option have the opportunity to transition to the that program while transferring up to 12 course credits.
Minor other changes include additional courses approved for credit requirements, and relaxation of conditions on thesis committee composition allowing for external (possibly industry-affiliated members) with the approval of the graduate committee.
The course requirements listed in the proposed program are not new; they are a combination of the requirements listed in the existing MSME and MEM programs.   The two existing programs had the same admission requirements, which will be preserved for the new one.

Rationale:

The existing structure has proved to be confusing for graduate applicants.  They rarely understand the differences between the two programs before being admitted, and there is a lot of traffic through changes of classification after their orientation.

The new structure is expected to reduce administrative load and provide more flexibility to program participants in terms of course selections and academic orientation.

Survey data by incoming program participants seem to indicate that most candidates would prefer the MSc to the MEg degree title for increasing their chances of securing a desired professional position either in the US or in their home country.

The new degree with the non-thesis option is likely to be even more attractive to professionals compared to the existing MEM program.

Regional competitors (e.g., Penn, Stevens) are marketing their MS programs without compulsory thesis requirements.

There are more non-thesis MSc programs (with no capstone experience), both in the College of Engineering (e.g., Electrical Engineering, Civil Engineering) and outside (e.g., Fashion & Apparel Studies, Disaster Science and Management).

Merging the two existing programs will facilitate taking the program online in the future.

No new course is required.

Resolutions:

REVISION OF THE MEEG MSME GRADUATE DEGREE

WHEREAS,     the existing structure with two separate masters programs,
                        [MSME](http://www.me.udel.edu/downloads/MSME-Requirements.pdf) and [MEM](http://www.me.udel.edu/downloads/MEM-Requirements.pdf), has proved confusing to program applicants,
                        and

WHEREAS,     survey data by incoming program participants seem to indicate
                        that most candidates would prefer the MSc to the MEg degree
                        title for increasing their chances of securing a desired
                        professional position either in the US or in their home country,
                        and

WHEREAS,    departments in regional competitor schools are marketing their MSc programs without compulsory thesis requirements, and

WHEREAS,    there are non-thesis MSc programs (with no capstone
                        experience), both in the College of Engineering as well as
                        outside, and

WHEREAS,     merging the two existing programs will facilitate taking the
                        single masters program online in the future, and

WHEREAS,     the new structure is expected to reduce administrative load
                        and provide more flexibility to program participants in terms of
                        course selections and academic and research orientation,
                        be it therefore

RESOLVED,   that the MSME program in the Department of
                        Mechanical Engineering be revised to have degree
                        requirements as listed in the Attachment