

UNIVERSITY OF WISCONSIN-MILWAUKEE
DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING
COST AND REVENUE PROJECTIONS NARRATIVE

Introduction

At the graduate level, UW-Milwaukee College of Engineering and Applied Sciences (CEAS) has offered a long-standing, college-wide Ph.D. in Engineering, spanning the various engineering disciplines of the college. Each engineering discipline functions, essentially, as its own individual program. Through this Request for Authorization, the university requests to separate the Mechanical Engineering portion of the college-wide Ph.D. program into its own program. A doctorate in the specific discipline of Mechanical Engineering is preferred in some fields and abroad. Many companies require this credential, particularly for research and development positions. Implementing the proposed Ph.D. in Mechanical Engineering will serve to sustain the program by supporting both student and market demands. The proposed Ph.D. Program in Mechanical Engineering will essentially be the same as the Mechanical Engineering portion of the existing college-wide Ph.D. program. Curricular areas will be unchanged (covering typical graduate-level mechanical engineering content), and there is no planned change in research focus – current areas of strength include renewable energy, rehabilitative robotics, power storage, tribology, optics, sensor development, structural health monitoring, and water filtration.

Section I – Enrollment

There has been an average of 38 Ph.D. students enrolled in the Mechanical Engineering portion of the CEAS (college-wide) program in recent years (a number which has been relatively stable for a considerable time). In the 2015-2021 span, there were 39 Ph.D. graduates in the Mechanical Engineering portion of the CEAS Ph.D. program, for an average of approximately six per year. It is not anticipated that enrollment figures will change subsequent to implementation of the stand-alone program. As stated the implementation of this program will serve to sustain student demand.

Section II – Credit Hours

The program will be comprised of 66 graduate credits beyond the Bachelor's degree with minimum credit distribution as detailed in the authorization request.

Section III – Faculty and Staff Appointments

There will be no additional faculty of staff needed to deliver this program.

Section IV – Program Revenues

There will be no additional revenue associated with the program, but, neither will there be any additional costs. The enrollment is expected to remain at the current level in the existing track. Therefore, there are no new revenues over current levels of revenues to include in the table. The 7 new students shown as entering the program each year is the same as the number of new students entering the track.

Section V – Program Expenses

There are no new costs to the institution associated with the new program. The instructional and other resources associated with the current track will be applied to the new program. There are no new courses or staffing needed to implement the current track as a new degree.

Section VI – Net Revenue

There are no new revenues and no new expenses with changing the Mechanical Engineering track to a stand-alone academic degree program. All of the courses have been developed and the faculty are already in place at the university.

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