## Memorandum of Understanding MS in Electrical Engineering December 2012

This Memorandum of Understanding outlines the consensus reached by the College of Engineering, the Department of Electrical Engineering, and the Division of Academic Affairs based on the recently conducted program review of the MS in Electrical Engineering. It describes the goals to be achieved and the actions to be undertaken by all parties to this MOU to achieve these goals during the next program review cycle. Progress toward goals is to be addressed in the annual report.

Strengths of the MSEE program identified by the external reviewers include a dedicated faculty that is generous with its time for its graduate students, and laboratories, equipment, and research space adequate to meet the needs of the program.

Issues emerging from the internal program review include:

The large number of master's students in the program creates a significant overload for faculty members who supervise their culminating projects. While a formula is in place to "bank" credit for project supervision, faculty are not always able to use the large amount of WTU accumulated as assigned time because they are needed for instruction. The external reviewers recommended that admission to the program become more selective so as to reduce the size of entering cohorts; currently the GPA requirement for admission is only 2.7, the GRE is not required, and there are no supplemental requirements. The reviewers recommended reducing the size of the student body by 10-15%. It was also noted that project supervision was unbalanced among the faculty members.

The MSEE program currently advertises 11 emphases from which students can choose for their program of study. The reviewers found that the faculty is not able to offer all the courses that are on the books for these emphases, and that students complained of not being able to take courses in the emphasis of their choice. The reviewers recommended focusing on 5-6 areas of curricular emphasis.

The internal review team noted the need to build on and strengthen the program's assessment plan. Specific recommendations included the development of curriculum maps for the core learning goals; the development of rubrics for assessing learning outcomes in the culminating activities; and more direct assessment of learning using student work.

## It is therefore agreed that:

- I. The program faculty will continue to review and revise its admissions criteria so as to raise the quality of entering cohorts while maintaining enrollment size at a level that is in alignment with faculty resources.
- 2. The program faculty will develop and implement a plan for a reasonably uniform distribution of thesis/project supervision.

- 3. In academic years 2012-13 and 2013-14, the program faculty will undertake a comprehensive review of its curriculum with the goal of achieving consensus on a significantly reduced number of emphasis options that would best represent faculty expertise and best serve students with a focused and available schedule of offerings.
- 4. *In academic years 2012-13 and 2013-14*, the program faculty will develop curriculum maps for core learning goals, develop rubrics for assessing learning in the culminating activity and/or will assess student learning directly through analysis of student work. Resources adequate for the conduct of assessment will be provided to the program faculty.

I his MOU has been read and approve	a by:	
Department Chair:	Date:	3/28/13
College Dean:	Date:	3/28/13

Vice Provost: Criter undsaig Date: 4-2-13