

Master of Science in Electrical Engineering (MSEE) College of Engineering and Mines (CEM)

Table 4.1 Outcomes Assessment Implementation Summary

	Academic Year		
	2007-08	2008-09	2009-10
Assessment information collected	1) Comprehensive Exam 2) Grad Committee Evaluation	1) Comprehensive Exam 2) Grad Committee Evaluation	1) Comprehensive Exam 2) Grad Committee Evaluation

<p>Conclusions drawn from the information collected above and how are faculty collectively involved in drawing conclusions</p>	<p>1) Comprehensive Exam pass rate: 4/4</p> <p>2) Grad. Com. Eval. Results:</p> <p>MSEE (8)</p> <p>Math/Sci/Eng: 3.13</p> <p>Cri.Think: 3.19</p> <p>Commun: 3.50</p> <p>Eng.Tools: 3.69</p> <p>Gui.Research: 3.66</p> <p><u>Avg: 3.43</u></p> <p>The Grad.Eval surveys were followed by an outcomes assessment discussion during a department meeting in May 2008.It was concluded that an algorithm placing more weight on higher GRE quantitative scores, as well as on student grades in math and other technical &major related courses resulted in the admission of students with an overall higher average in all evaluated categories as listed above. This was also evident through improved class performance and Comp Exam results.</p>	<p>1)Comprehensive Exam pass rate: 2/2</p> <p>2) Grad. Com. Eval. Results:</p> <p>MSEE (3)</p> <p>Math/Sci/Eng: 3.21</p> <p>Cri.Think: 3.36</p> <p>Commun: 3.07</p> <p>Eng.Tools: 3.43</p> <p>Gui.Research: 3.36</p> <p><u>Avg: 3.29</u></p> <p>Following the Grad.Eval.surveys, MSE student outcomes were scheduled for discussion In a dept meeting in May 2009, as well as in the first few meetings of Fall 2009. The improved graduate student quality, which also reflected to the overall student performances was noted again in this academic year, hence, it was decided to continue with the same selection approach.</p>	<p>1)Comprehensive Exam pass rate: 5/6</p> <p>2) Grad. Com. Eval. Results:</p> <p>MSEE (2)</p> <p>Math/Sci/Eng: 3.75</p> <p>Cri.Think: 4.0</p> <p>Commun: 4.75</p> <p>Eng.Tools: 4.50</p> <p>Gui.Research: 4.50</p> <p><u>Avg: 4.30</u></p> <p>The ECE faculty are overall content with the performance of MSEE students. However, the department always seeks for ways to improve the graduate program with new courses and increase the number of quality graduate applicants, particularly by retaining good ECE undergraduate students.</p>
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<p>Curricular changes resulting from conclusions drawn above</p>	<p>Development of a stable 2-year plan for improved effectiveness is always in assessment and progress: best timing for the Comp Exam still under assessment.</p>	<p>A new graduate course (EE 693: Sustainable Energy Systems) offered in Spring 2009. Another new graduate course (EE 656: Space Systems Engineering) offered in Fall 2008. Also, an increased number of undergraduate research projects under ECE faculty mentorship through NASA, ASPG, and NSF in an effort to attract and retain high quality ECE undergraduate students to MSEE and PhD programs at ECE.</p>	<p>A revised graduate courses (EE 667: Satellite Communication) based on new software, AGI Satellite Tool Kit, offered in Spring 2010; continued undergraduate research projects and proposals to increase the retention of high quality ECE undergraduate students.</p>
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