# Mechanical Engineering

**Program: Mechanical Engineering**  
Degree: Ph.D.  
Date Submitted: May 6, 2006

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<th>Program Learning Outcomes</th>
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<td>Students will be able to:</td>
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| 1. Apply knowledge of advanced concepts (i.e., concepts beyond those learned during the M.S. program) in engineering mathematics and two out of three areas of specializations offered in the department (Mechanical systems, Energy systems, Manufacturing systems). | Ability to formulate and solve complex problems.  
Ability to conduct the analysis and design of complex systems. | (a)Evaluation forms completed by the major advisor at the end of every year  
(b) Passing the Ph.D. Proficiency exam | Faculty will complete forms and submit (for review) to the graduate committee at the end of each academic year. These forms will be filed by the administrative assistant in the student folders. Summary form will be evaluated by graduate committee at the completion of the student’s program. |
| 2. Communicate their ideas (specific to their area of specialization) to their peers. | Ability to develop and present oral and written reports.  
Presentation of proposed research project to peers at one of the department seminar series. | (a) Successful presentation of their proposed research topic at the Qualifying exam  
(b) Presentation at the annual department student poster conference by outside reviewers. | Refer above |
| 3. Conduct original research in their chosen area of specialization | Ability to present original research articles for refereed publication I journals and/or symposiums | Successful completion of final Dissertation defense | Refer above |