# Ohio University ME Program Educational Objectives

PEOs Reviewed / Modified / Approved (2007-2009) by Industrial and Student Advisory Boards

<table>
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<th>Objective</th>
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| 1. | Prepare graduates for engineering careers and advanced education  
   a. Graduates will be able to perform as competent entry-level engineers in a range of industries.  
   b. Select graduates with the ability and desire will be able to perform as competent graduate students in a range of graduate programs (including engineering, business, medicine, law or other related fields).  
| 2. | Graduate mechanical engineers with technical skills  
   a. Demonstrate a grasp of engineering knowledge  
      *Mastery of fundamentals – including Mathematics and Basic Sciences, Engineering Mechanics, and Thermal Sciences*  
      *Knowledgeable in engineering specialty topics – including Materials and Manufacturing*  
   b. Proficient in learning, using, and understanding technology, resulting in a solid foundation for life-long learning  
   c. Demonstrate an ability to apply knowledge to solve contemporary engineering problems  
      *Solve open-ended problems*  
      *Formulate and articulate the problem to be solved, develop requirements, gather data, determine root cause if appropriate and synthesize solutions.*  
      *Differentiate between and work in situations that require evolutionary design (use of standard parts, standard practices, and engineering standards) and revolutionary ideas (innovation and creativity)*  
| 3. | Graduate mechanical engineers with skills to perform in the work environment  
   *Supporting outcomes:*  
   *Safety and health – including awareness of Material Safety Data Sheets and appropriate use of personal protective equipment and Design for Safety methods*  
   *Technical communication: Oral and written*  
   *Teamwork*  
   *Project management: planning, scheduling, budgeting*  
   *Self evaluation, leading to improvement*  
   *Awareness of standards, including safety, design, manufacturing, testing and quality*  
   *Appreciation of engineering integration with business – including market awareness, customer satisfaction, quality, continuous improvement, profit, and awareness of the concepts of mission, vision and core values for a company.*  
   *Ethical and effective decision making involving environmental health and safety, economics, time, quality, performance, reliability and life cycle.*  
| 4. | Graduate mechanical engineers who are informed and aware of contemporary issues and the impact of engineering on society |