

Table B4: Program Educational Objectives Statements (9/2003)

The Ohio University Mechanical Engineering Department's Educational Objectives are to:

1. Prepare graduates for **engineering careers and advanced education**
 - Graduates will be able to perform as competent entry-level engineers in a range of specialty areas and industries.
 - 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, or other related fields).
2. Graduate mechanical engineers with **technical skills**
 - a. Demonstrate a grasp of engineering knowledge
 - Mastery of fundamentals - Mathematics and science-based knowledge (Thermal/Fluids, Dynamics, etc)
 - Knowledgeable in engineering specialty topics (Materials, Manufacturing, etc.)
 - Proficient in learning, using, and understanding technology
 - Solid foundation for life-long learning
 - b. Demonstrate an ability to apply knowledge to solve contemporary engineering problems
 - Solve open-ended problems
 - Formulate and articulate the problem to be solved, gather data, determine root cause if appropriate and synthesize solutions.
 - Able to differentiate between and work in situations that require evolutionary design (use of standard parts, standard processes, and engineering standards) and revolutionary ideas (innovation and creativity)
3. Graduate mechanical engineers with **skills to perform in the work environment**
 - Technical communication: Oral and written
 - Teamwork
 - Decision making: Ethical and effective in making trade-offs involving economics, performance/ operability, reliability/ life, safety and schedule.
4. Graduate mechanical engineers who are **informed and aware** of contemporary issues and the impact of engineering on society