UNIVERSITY OF CALIFORNIA, RIVERSIDE

Student Learning Outcomes for the B.S. in Materials Science and Engineering

Students completing the B.S. major will be able to:

- 1. apply knowledge of mathematics, science, and engineering
- 2. design and conduct experiments, as well as to analyze and interpret data
- 3. design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- 4. function on multidisciplinary teams
- 5. identify, formulate, and solve engineering problems
- 6. have an understanding of professional and ethical responsibility
- 7. communicate effectively
- 8. have the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- 9. recognize the need for, and an ability to engage in life-long learning
- 10. have a knowledge of contemporary issues
- 11. use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Website: http://www.mse.ucr.edu/