

**University of Southern California**  
**VITERBI SCHOOL OF ENGINEERING**

Master of Science in Aerospace and Mechanical Engineering (Dynamics and Control)  
*Program Learning Objectives*

The Master of Science in Aerospace and Mechanical Engineering (Dynamics and Control) prepares students to practice engineering at an advanced level in a specialization within aerospace and mechanical engineering and to recognize the benefit of solving problems using expertise from other engineering disciplines. Students improve their skills in setting up and solving problems by using contemporary tools and leveraging interaction with peers. In addition, this degree provides students with the knowledge and tools necessary for the analysis of complex aerospace and mechanical systems and design of control systems for such systems.

The Master of Science in Aerospace and Mechanical Engineering (Dynamics and Control) degree program in the Department of Aerospace & Mechanical Engineering is designed to satisfy the following learning objectives:

1. provide breadth of knowledge to further an awareness of the interdisciplinary nature of aerospace engineering;
2. provide depth of knowledge in a particular field of study;
3. further develop the ability to formulate problems, to synthesize and integrate information, to work collaboratively, and to communicate effectively;
4. educate students in methods of advanced analysis and the use of tools appropriate to an increasingly complex field;
5. prepare students for successful careers regardless of the path they follow; and
6. provide students with the knowledge and tools necessary for the analysis of complex aerospace and mechanical systems and design of control systems for such systems.