

## **ME 125YV - Vehicle Dynamics**

**Prerequisites:** ME 14 and ME16.

Selected topics in automotive vehicle dynamics, with applications to road or race cars. The course introduces fundamental principles and mathematical descriptions, including topics in vehicle kinematics, kinetics, dynamics and handling, tire friction and mechanics, steering dynamics, suspension mechanisms and dynamics, and vehicle models. Select advanced topics may be introduced, such as performance-based control, trajectory optimization, human operator control, or aerodynamics.