ME 8. Introduction to Robotics. *6 units (2-2-2); first term.* This course examines the range of concepts and engineering approaches applicable to robotics, including mobile systems (driving and walking) as well as manipulators (arms and legs). Robotics needs tools from mechanical design and fabrication, mathematical analysis of mechanisms, a variety of sensors, programming at all levels, algorithms to interpret visual images, and planners to determine actions. But robots also act in a larger context, involving human-robot interactions, social cues, and even raising ethical questions. The course will explore these topics through assignments, readings, and mini projects. Instructor: Niemeyer.