

New Course Offering • Fall 2016

ENGR 4100 Industrial Robotics

W 12:30-2:20 pm (Lecture); F 12:30-3:20 pm (Lab)



This course is devoted to the study of **robot manipulators**, which are commonly used in manufacturing lines.

Students will learn about: a) the different types of robot manipulators, b) the principles of kinematics, dynamics, trajectory planning, and control of robot manipulators, and c) the different types of actuators and sensors employed in robot manipulators.

Lab experiments will use the ***Kinova 4-DOF serial manipulator with two-finger gripper***. Robot programming will be done using MATLAB/Simulink.

Main pre-requisites: Dynamics (ME 3133, CE 2460, or equivalent); Experience with MATLAB.

Enrollment: Limited to 18 students. Open to **any undergraduate or graduate student** who meets the pre-requisites. However, if the enrollment limit is reached, priority will be given to students who have declared the Robotics Engineering minor. Contact the instructor below to enroll.



Instructor: Dr. Marcio de Queiroz, Mechanical Engineering
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