

COLLEGE OF CHEMISTRY COURSE GUIDE (../INDEX.HTML)

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BIOE C125/EE C106A - INTRODUCTIONS TO ROBOTICS (4 UNITS)

(Taken from the UC Berkeley Course Guide (<http://guide.berkeley.edu>))

COURSE OVERVIEW

SUMMARY

An introduction to the kinematics, dynamics, and control of robot manipulators, robotic vision, and sensing. The course covers forward and inverse kinematics of serial chain manipulators, the manipulator Jacobian, force relations, dynamics, and control. It presents elementary principles on proximity, tactile, and force sensing, vision sensors, camera calibration, stereo construction, and motion detection. The course concludes with current applications of robotics in active perception, medical robotics, and other areas.

PREREQUISITES

EE 120 ([ee120.html](#)) or equivalent, consent of instructor

Fall only

WORKLOAD

TIME COMMITMENT

3 hours of lecture, 1 hour of discussion, and 3 hours of laboratory per week.

COLLEGE OF CHEMISTRY PEER SERVICES

Made by Angela Lee, c/o 2019



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