

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

MAJORS (../MAJOR.HTML) LIST OF COURSES (COURSES.HTML)

RESOURCES (../RESOURCES/RESOURCE.HTML)

STUDENT LIFE (../STUDENTLIFE/ORGS.HTML)

BIOE C125B/EE C106B - ROBODIC MANIPULATION AND INTERACTION (4 UNITS)

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

COURSE OVERVIEW

SUMMARY

This course is a sequel to Electrical Engineering C106A/Bioengineering C125, which covers kinematics, dynamics and control of a single robot. This course will cover dynamics and control of groups of robotic manipulators coordinating with each other and interacting with the environment. Concepts will include an introduction to grasping and the constrained manipulation, contacts and force control for interaction with the environment. We will also cover active perception guided manipulation, as well as the manipulation of non-rigid objects. Throughout, we will emphasize design and human-robot interactions, and applications to applications in manufacturing, service robotics, tele-surgery, and locomotion.

PREREQUISITES

EE C106A/BIOE C125 ([bioec125.html](#)) or consent of instructor

Spring only

WORKLOAD

TIME COMMITMENT

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

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

COLLEGE OF CHEMISTRY PEER SERVICES

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