MECH 572. MECHANICS AND CONTROL OF ROBOTIC MANIPULATORS.

Credits: 3

Offered by: Mechanical Engineering (Faculty of Engineering)

This course is not offered this catalogue year.

Description

Historical development and applications of robotic manipulators. Homogeneous transformations and geometry. Forward and inverse kinematics, manipulator Jacobian. Newton-Euler and Lagrangian formulations of inverse and forward dynamics. Trajectory planning for pick-and-place operations. Linear independent joint control and nonlinear model-based control schemes.

- (3-0-6)
- Prerequisites (Undergraduate): MATH 271 and MECH 412 / MECH 419 or permission of instructor
- Restriction: Not open to students who have taken MECH 573