Motion Systems

Last Updated: Wed, 03/18/2026

Course prefix: ME

Course number: 4012

Section: A

CRN
92117

Instructor first name: Yi

Instructor last name: Mazumdar

Semester: Fall

Academic year: 2026

Course description:

ME 4012 Motion Controls teaches students how to derive dynamic models, design feedback control systems, utilize system identification methods to estimate parameters, implement controllers in different laboratory exercises, and apply their knowledge in a hands-on final project. Feedback control design techniques discussed in class include root locus, loop shaping, state space, and digital z-transform methods.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.