

Engineering Fundamentals: Neuroengineering

Use this list of engineering courses to fulfill your engineering fundamentals within this track. Courses are chosen with the assistance of the student's advisor, with final approval by the Graduate Committee.

Required Traditional Engineering (at least 1):

ECE 4270/6250 - Signal Processing
ECE 4551/6550, ME 6401/6403 - Controls
ECE 6435 - Circuits
ECE 7251 - Detection and Estimation
ME 6441/6201/6206/6782 - Mechanics
ME/MSE 6768/6796 - Materials

Required Neuroengineering Courses (at least 1):

BMED/ECE 6787 - Quantitative Electrophysiology (Bhatti)
BMED 7610 - Quantitative Neuroscience (Stanley)
BMED/ECE 8813 - Information Processing Models in Neural Systems (Rozell)
IBS 534 - Computational Neuroscience (Jaeger)
BMED 8813 - Computational Neuromechanics of Human Movement (Ting)

Other Recommended Courses:

APPH: Biomechanical Aspects of Motor Control
APPH 6232: Locomotion Neuromechanics
ME 6407: Robotics
ME 6402: Nonlinear Control Systems
ME 6782: Cellular Engineering
BMED 8813/DPT 988: Engineering-Rehabilitation Interface