ROBOTICS
THE UNIVERSITY OF UTAH

Undergraduate Minor Requirements

Minimum 16 credits

CORE COURSES

Required (3 credits)

Choose ***two*** additional core classes (6 credits) from different categories. Foundational Courses may **not** be double counted as Core Courses

MECHANICS	CONTROL	COGNITION	PERCEPTION
ROBOT 5000/ CS 5310/ ECE 5650/ ME EN 5220 (3 cr) Robotics I: Mechanics	**ROBOT 5100/ ME EN 5230 (3 cr)** Robotics II: Control	* **ROBOT 6200/ CS 6370/ ME EN 6225 (3 cr)** Motion Planning *or* **CS 4300 (3 cr)** AI	**CS 4640 / BME 4640 (3 cr)** Image Processing *or* * **CS 5320 (3 cr)** Computer Vision

PROJECT REQUIRMENT (1 credit minimum)

ROBOT 5920 (Independent) Graduate Project with faculty + presentation

or

May be fulfilled by:
Approved Intensive Project Course *

ROBOT 6500 / ME EN 5240 (4 cr)
Advanced Mechatronics
ROBOT 6960 (3 cr)
Wearable Robotics
ROBOT 6200/ CS 6370/ ME EN 6225 (3 cr)
Motion Planning
CS 6320 (3 cr)
Computer Vision
ROBOT 6400/BME 6440/ECE 6654 (4 cr)
Neural Engineering

* Students choosing to take project-intensive courses to double count as CORE and PROJECT *may need to take additional approved electives or the Robotics Seminar* to reach the 16 credit hour minimum.

FOUNDATIONAL COURSES

Complete ***one set of two courses*** (students must meet course prerequisites in order to enroll)

Set 1: MECHANICAL ENGINEERING

ME EN 3220 (3 cr)
Dynamic Systems & Control
ME EN 3230 (4 cr)
Mechatronics

Set 2: ELECTRICAL & COMPUTER ENGINEERING

ECE 3610 (3 cr)
Fundamentals of Robotics & Cyberphysical Systems
ECE 5615 (3 cr)
Classical Control Systems

or Set 3: COMPUTER SCIENCE

CS 4300 (3 cr)
Artificial Intelligence
CS 4640 (3 cr)
Image Processing Basics