ROBOTICS
THE UNIVERSITY OF UTAH

MS Degree Requirements

CORE COURSES

Required

ROBOT 6000
Robotics I: Mechanics

ROBOT 6100
Robotics II: Control

ROBOT 6200
Motion Planning
or
CS 6300
Artificial Intelligence

CS 6640
Image Processing
or
CS 6320
Computer Vision

SEMINARS

ME EN 6890
or **CS 7930**
or **ECE 6900**
(Thesis option only)

ROBOT 6800
Robotics Seminar
(Enroll in 2 semesters for 1 credit each semester)

THESIS or PROJECT

ROBOT 6970 Master's Thesis
or
ROBOT 6920 Graduate Project
or
ROBOT 6920 + Approved coursework with intensive project (6 Credits)

ALLIED COURSES

3-4 Cr. (as needed to reach the 30-credit hour coursework minimum requirement)

ELECTIVE COURSES

Select 2 classes from two different categories:

MECHANICS

ROBOT 7000
Manipulation, Mobility
ROBOT 7010
System Identification for Robotics

COGNITION

CS 6350
Machine Learning
CS 6958
Robot Learning

CONTROL

ME EN 6200/ ECE 6615
Classical Control Systems
ECE 6670
Control of Electric Motors
ME EN 6210/ ECE 6652/ CH EN 6203
State Space Control
ME EN 7200
Nonlinear Control
ME EN 7210
Optimal Control
ECE 6570
Adaptive Control

DESIGN

ROBOT 6500
Advanced Mechatronics
ROBOT 6960
Wearable Robotics
ECE 6780/ CS 6780
Embedded System Design
ECE 6960
Robotic Millisystems
CS 6956
Medical Robotics

HUMAN-ROBOT INTERACTION

CS 6360
Virtual Reality
ROBOT 7400
Haptics for VR,Tele-operation, and Physical Human-Robot Interaction
ROBOT 6400
Neural Engineering and NeuroRobotics

PERCEPTION

CS 7640
Adv. Image Processing
CS 6353
Deep Learning for Image Analysis
ECE 6530
Digital Signal Processing