

Motion Planning RBE 550

FALL 2024 Course Schedule:

This schedule is subject to change but we will try to keep as close as possible to the schedule below.

Date	Topic	Instructor	Projects
8/22	Introduction	C.Chamzas	Project0 & Project1 out
8/26	Bug Algorithms, Potential Fields	C.Chamzas	
8/29	Roadmaps and Discrete Search	C.Chamzas	Project0 due
9/2	Labor Day (No Class)		
9/5	Configuration Space	C. Chamzas	Project1 due, Project2 out
9/9	Tree-Based Planners and OMPL	C. Chamzas	
9/12	Configuration Space Obstacles	C. Chamzas	
9/16	Probabilistic Roadmap Planners	C. Chamzas	
9/19	Theoretical Issues	C. Chamzas	
9/23	Asymptotically Optimal Planning	C. Chamzas	Project2 due, Project3 out
9/26	Collision Checking	C. Chamzas	
9/30	SPARS/Dynamic Roadmaps	C. Chamzas	
10/3	Kinodynamic Planning I	C. Chamzas	
10/7	Kinodynamic Planning II	C. Chamzas	Project3 due, Project4 out
10/10	Midterm (In Class)	C. Chamzas	
10/14	Fall Break (No Class)		
10/17	Fall Break (No Class)		
10/21	Learning and Planning I	C. Chamzas	
10/24	Learning and Planning II	C. Chamzas	Final-Project out
10/28	Midterm & Final Projects	C. Chamzas	Project 4 due
10/31	Task and Motion Planning	C. Chamzas	
11/4	Task and Motion Planning II	C. Chamzas	Declare Final-Project
11/7	Optimization Based Planning	C. Chamzas	
11/11	Planning under Uncertainty	C. Chamzas	
11/14	Class Overview	C. Chamzas	
11/18	Mid-Report Presentation	Students	Mid Report due
11/21	Guest Lecture 1	R. Natarajan	
11/25	Final Exams (In Class)	C. Chamzas	
11/28	Thanksgiving Break (No Class)		
12/2	Guest Lecture 2	H. Lakshmanan	
12/5	Multi-Robot Planning (Online)	A. Orthey	
12/9	Reading/Make-Up Day (No Class)		
12/12	Final-Project Presentations	Students	Final Report due