

Introduction to Robotics (Fall 2012)

Added by [Timothy Bretl](#), last edited by [Ricardo Toro Santamaria](#) on Dec 13, 2012

AE 482 / CS 443 / ECE 470 / IESE 421 / MechSE 445

Personnel

- **Instructor:** [Tim Bretl](#)[✉]. Office: CSL 148, Phone: 217-244-3126, Email: tbretl@illinois.edu[✉]
- **TA:** Aadeel Akhtar, Email: aakhta3@illinois.edu[✉]
- **TA:** Ricardo Toro, Email: torosant@illinois.edu[✉]

Time and Place

Tu/Thu 9:30AM-10:50PM, 218 Ceramics

Office Hours

- Prof. Bretl: M 1pm-2pm in **CSL 148** and F 4pm-5pm in **Talbot 321A**
- Mr. Akhtar: W 2:00pm - 3:30pm, Th 11am-12:30pm in **CSL 139**
- Mr. Toro: M 3pm-3:50pm and 5pm-6pm, Tu 4:50 pm - 6:00 pm in **Everitt 267**

Required Texts

- [Robot Modeling and Control](#)[✉] (Spong, Hutchinson, and Vidyasagar, Wiley, 2009) — it will be available at the Illini Union Bookstore.
- [ECE 470 Lab Manual](#)[✉] — hard copies available for approximately \$10 from Everitt 60

Homework

Please hand in homework at the beginning of class on the day that it is due.

- [HW1 \(due Thursday, September 20\)](#)[✉] : [Solution](#)[✉]
- [HW2 \(due Tuesday, October 9\)](#) : [Solution](#)[✉]
- [HW3 \(due Thursday, November 1\)](#)[✉] : [hw3code.m](#)[✉] [Solution](#)[✉]
- [HW4 \(due Tuesday, November 27\)](#)[✉] [Solution](#)[✉]
- [HW5 \(due Tuesday, December 11\)](#)[✉] : [hw5code.m](#)[✉] [Solution](#)[✉] [hw5_soln.m](#)[✉]

Lab

Week	Lab Schedule
Sept 4 - 6	Lab 1 - Intro. To Robotics Lab.
Sept 11 -13	Lab 2 - Intro Tower of Hanoi.
Sept 18 - 20	Lab 2 - Demo.
Sept 25 -27	Lab 3 - Intro. Forward kinematics.
Oct 2 - 4	Lab 3 - Demo.
Oct 9 - 11	Midterm week NO Labs.
Oct 16 -18	Lab 4 - Intro. Inverse Kinematics.
Oct 23 -25	Lab 4 - Cont.
Oct 30 - Nov 1	Lab 4 - Demo.
Nov 6 - 8	Lab 5 - Intro. Image Processing.
Nov 13 - 15	Lab 5 - Demo.
Nov 20 - 22	Thanksgiving week NO Labs.
Nov 27 -29	Lab 6 - Intro camera Calibration.
Dec 4 - 6	Lab 6 - Demo.

Ricardo Toro	Tuesday - Thursday	3:00 pm - 4:50 pm
Aadeel Akhtar	Tuesday - Thursday	1:00 pm - 2:50 pm

Exams

- Midterm Exam (7:00-10:00 PM on Wednesday, October 10, in Ceramics 218): [Solution](#) 📄
- Final at 8:00AM-11:00AM, Saturday, December 15, in Ceramics 218

Grading

- 25% homework, 25% lab, 25% midterm, 25% final

Homework Policy

Homework is due at the start of class. Late homework will be penalized 10% per calendar day. No homework will be accepted after graded homework is returned.

Lab Attendance Policy

Attendance during lab is strictly required, unless a written explanation is obtained from the emergency dean. You will not receive credit for a lab or demonstration that you do not attend.

Website

- <https://wiki.engr.illinois.edu/display/ECE470/>

Child Pages (1)

[Homework 2 - Forward Kinematics and Velocity Kinematics](#)

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