

Course Description of EE405A Electronic Design Lab

RoboCam (Robotic Camera)

Spring 2017

Lecture

Time: Friday 4 PM – 5 PM, E3-1220.
 Lecturer: Prof. Byung Kook Kim, E3-1225, 042-350-3435, bkkim@kaist.ac.kr
 General TA: Tae Hyung Kim, E3-1230, 042-350-5435, thkim@rtcl.kaist.ac.kr

Lab

Hierarchy: Course EE405A – Class – Group - Student
 Class 1: Thursday 4 – 7 PM, and Monday 4 – 7 PM, at N5-2353.
 Lab may be shared with another course, but is open 9 AM – 10 PM, Monday to Friday.
 Group: Two students/group, max 16 groups/class.

Description

This is a capstone design course including hardware and software. We design a RoboCam – Robotic Camera - as a proto-typical embedded system, composed of cross-development system, light control, robot, WiFi, WebCam and system integration, and system enhancement.

Schedule

Lab	Weeks	Topic	Lecture (prev. Fri)	Lab (Mon, Thu)	Lab Report (Tue 6 PM)
Lab 1	2-3	Cross Development Environment	Mar 3, Mar 10	Mar 6, 9, Mar 13, 16.	Mar 21
Lab 2	4-5	Light Control	Mar 17, Mar 24	Mar 20, 23,, Mar 27, 30.	Apr 4
Lab 3	6-7	Mobile Robot	Mar 31, Apr 7	Apr 3, 6, Apr 10, 13.	Apr 25
Lab 4	9-10	WiFi	Apr 14, Apr 28	Apr 24, 27, May 1, 4.	May 9
Lab 5	11-12	WebCam and System Integration	May 4 Thu, May 12	May 8, 11, May 15, 18.	May 23
Lab 6	13-15	System Enhancement	May 19, -, June 9	May 22, 25, May 29, Jun 1.	-

Course Website:

<http://rtcl.kaist.ac.kr/~bkkim/lecture/designlab>

Grading Policy*

Pre-report 20 % One per group.
 Demo 40 % One per group.
 Main report 30 % One for each student. Different discussions for students in each group.
 Late policy: -10% per working day (Monday to Friday. -50% per week)
 Attendance 10 % Late: -20% of attendance.