

Course Title	()	()	Introduction to Electronics
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() Lecturer	()	/ / (Course No. /)	006099/ /3
(/HP) Contact No.		/ (Class Hour/Venue)	/ 12:00-13:30 / 106 & 1007
(Course Prerequisite)	Physics	(Target Student)	Mechanical Engineering Junior
E-mail (E-mail Address)		/Office Hour (Office/Office Hour)	1114 / / 15:00-16:30

(Objectives)	Key topics of mechatronics such as basic electric/electronic circuits, data acquisition, sensors, actuators, motor control will be covered in this course.
CQI (Continuous Quality Improvement Plan)	hands-on lab enhancement
(Text book & References)	Main text: David G. Alciatore, Introduction to Mechatronics and Measurement Systems, Fourth Edition, McGraw-Hill Reference: W. Bolton, Mechatronics, 3rd edition, Prentice Hall, 2003.
(Assignment book)	David G. Alciatore, Introduction to Mechatronics and Measurement Systems, Fourth Edition, McGraw-Hill
(Lecture Methods)	PPT and hands-on laboratory
(Assignment)	1. Electric/Electronic circuits 2. Sensors 3. Data Acquisitions 4. Actuators 5. Feedback Control 6. Term project
(Reading Materials)	
가 (Course Grading)	[가] (%) : 40, (%) : 20, 가 (%) : 10, (%) : 10, LAB : 20, Midterm (40)%, Final (20)%, Lab (20)%, Attendace (10)%, Homework (10)%
(Etc.)	

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(Week)	(Course Contents)	(Etc.)	
1	Introduction, Electronic Circuit	PPT & Lab.	
2	Electric Circuits, Sensors,	PPT & Lab.	
3	Actuators	PPT & Lab.	
4	Data Acquisition , Video Demo	PPT & Lab.	
5	System Modeling	PPT & Lab.	
6	Transfer Functions Dynamic Responses	PPT & Lab.	
7	Exam I PID control	PPT & Lab.	
8	PID control , Signal Processing	PPT & Lab.	

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(Week)	(Course Contents)	(Etc.)	
9	Logic Control Systems	PPT & Lab.	
10	Logic Control Systems	PPT & Lab.	
11	Microcontroller Programming and Interfacing	PPT & Lab.	
12	Microcontroller Programming and Interfacing	PPT & Lab.	
13	Exam II, Project Explain	PPT & Lab.	
14	Mechatronic Systems , PROJECT1	PPT & Lab.	
15	PROJECT 2	PPT & Lab.	
16	Term Project presentation	PPT & Lab.	

<p style="text-align: center;">가 1 (Additional Guide1)</p>	<p style="text-align: center;">()</p> <p>Students who require special assistance (including special needs students) may contact their professors during the first week of the semester to discuss issues related to attendance, lectures, assignments and exams and request learning assistance.</p>
<p style="text-align: center;">가 2 (Additional Guide2)</p>	