

Exercise for Electrical and Electronic Engineering 1

Basic Course Information			
Course Number	01005140	Subject Category	Compulsory IM
Class Format	Lecture	Credit Type and Number of Credits	1
Department	Mechatronics	Student Category	Year 4
Period of Study	Semester 2	Classes per Week	2
Required Materials			
Instructor	Sompop Wongsheed	Kashine Takechi	

Course Objective
 The course provides students with further opportunity to practice calculation of Electrical and Electronic Engineering to deepen their understanding of circuits.

Evaluation/Unit/rd	Ideal Level of Achievement (Very Good)	Standard Level of Achievement (Good)	Unacceptable Level of Achievement (Fail)
	Ideal Level of Achievement (Very Good)	Standard Level of Achievement (Good)	Unacceptable Level of Achievement (Fail)
Circuit Simulation of DC Circuit	Demonstrates very good knowledge of Circuit Simulation of DC Circuit	Demonstrates very good knowledge of Circuit Simulation of DC Circuit	Lacks the appropriate knowledge of Circuit Simulation of DC Circuit
Circuit Simulation of AC Circuit	Demonstrates very good knowledge of Circuit Simulation of DC Circuit	Demonstrates very good knowledge of Circuit Simulation of DC Circuit	Lacks the appropriate knowledge of Circuit Simulation of DC Circuit

Relationship with Learning Outcomes
M2) Ability to design, propose and develop electrical and electronic systems for robotics/ mechatronic systems
 Please change
 Please change

Teaching Method
 Lecture
Outcomes: Repeat of Explanation-Drill
Class Format: Exercise of using Circuit Simulator
Please Note : Students are required to ask any questions after sufficient self-learning

Course Plan	Semester 2	Contents and Method of Course	Goals	Related MCG
1st week		Introduction to Circuit Simulator, Ltspice	Explaining Introduction to Circuit Simulator, Ltspice	II-A 1 7/2
2nd week		Circuit Simulation of DC Circuit (1)	Explaining Circuit Simulation of DC Circuit (1)	II-A 1 7/3
3rd week		Circuit Simulation of DC Circuit (2)	Explaining Circuit Simulation of DC Circuit (2)	II-C 1 5
4th week		Circuit Simulation of DC Circuit (3)	Explaining Circuit Simulation of DC Circuit (3)	II-C 1 5
5th week		Circuit Simulation of DC Circuit (4)	Explaining Circuit Simulation of DC Circuit (4)	II-C 1 5 II-D 1 9
6th week		Circuit Simulation of DC Circuit (5)	Explaining Circuit Simulation of DC Circuit (5)	II-A 1 7/2 II-D 1 9
7th week		Circuit Simulation of DC Circuit (6)	Explaining Circuit Simulation of DC Circuit (6)	II-D 1 9 II-D 1 9
8th week		Review before the midterm examination	Explaining the past work	
9th week		Midterm Examination		
10th week		Return Exam Papers and Feedback	Review and summarize learning	
11th week		Circuit Simulation of AC Circuit (1)	Explaining Circuit Simulation of AC Circuit (1)	II-C 1 9 II-D 1 9
12th week		Circuit Simulation of AC Circuit (2)	Explaining Circuit Simulation of AC Circuit (2)	II-C 1 9 II-D 1 9
13th week		Circuit Simulation of AC Circuit (3)	Explaining Circuit Simulation of AC Circuit (3)	II-C 1 9 II-D 1 9
14th week		Circuit Simulation of AC Circuit (4)	Explaining Circuit Simulation of AC Circuit (4)	II-C 1 9 II-D 1 9
15th week		Circuit Simulation of AC Circuit (5)	Explaining Circuit Simulation of AC Circuit (5)	II-C 1 9 II-D 1 9
16th week		Circuit Simulation of AC Circuit (6)	Explaining Circuit Simulation of AC Circuit (6)	II-C 1 9 II-D 1 9
17th week		Circuit Simulation of AC Circuit (7)	Explaining Circuit Simulation of AC Circuit (7)	II-C 1 9 II-D 1 9
18th week		Review before the final examination	Explaining the past work	
19th week		Final Examination		
20th week		Return Exam Papers and Feedback	Review and summarize learning	

Do not

	Examination	Quiz	Midst Semester Examinations	Report	Portfolio	Other
Special Ability						
Language Ability						
International Ability						