



ESOGÜ Electrical-Electronics Engineering Department

COURSE CODE:151221204-151241204 **COURSE TITLE:**Intro. to Electrical & Electronics Engineering

Semester	Weekly Hours		COURSE			
	Theoretical	Practical	Credits	ECTS	Type	Language
1	1	2	2	3	Compulsory (x) Elective ()	Turkish () English (x)
Write the credit (for non-credit courses weekly hours) below (If necessary distribute the credits.).						
Math and Basic Science		Electrical Engineering [mark (√) if there is high design content]		General Education		Humanities
		2 (x)				
Assessment		THEORETICAL-PRACTICAL COURSES			LABORATORY COURSES	
		Type	Number	%	Activity Type	Number %
Midterm		Midterm	1	30	Quiz	
		Quiz			Lab performance	
		Homework			Report	
		Project			Oral exam	
		Other (Lab)	8	40	Other (.....)	
Final		Project	1	30		
Makeup exam (Oral/Written)		Written				
Prerequisites		none				
Brief content of the course		Introduction to the university and department, introduction to the profession, basic concepts about voltage and current, wiring, soldering, hand tools, hobby circuits, and electrical safety.				
Objectives of the course		To create more interest into the profession, To introduce the basic concepts of voltage, current and power To initiate hands-on experience				
Contribution of the course towards professional education		Help students realize the importance of Electrical Engineering Help students be familiar with safety precautions				
Outcomes of the course		Students who attend this course will have a better understanding of the curriculum, the requirements, and senior projects. They will better understand what an engineer does in the Professional life.				
Textbook of the course		none				
Other reference books		none				
Required material for the course		Hand tools and components in Electronics Laboratory				

WEEKLY PLAN OF THE COURSE

Week	Topics
1	Introducing the University and EEE Department, course registration
2	Courses, practical training, senior projects and rules and regulations
3	Voltage, current, and electrical circuit components
4	Current, voltage and power measurements: analog and digital multi-meters
5	AC signals (frequency, period. RMS)
6	Function generator, oscilloscope
7	Electrical power generation and distribution
8	Midterm
9	Midterm
10	Electrical wiring, electrical installation, interior electrical wiring
11	ORCAD, Protheus
12	Soldering techniques
13	Project: Installation of a hobby electronic circuit
14	Electrical safety
15,16	Final

NO	OUTCOMES OF THE PROGRAMME	4	3	2	1
1	Adequate knowledge of mathematics, science and Electrical and Electronic Engineering; ability to practice theoretical and practical knowledge of these areas into modeling and solving complex problems of Electrical and Electronic Engineering				
2	Ability to identify complex engineering problems in Electrical and Electronic Engineering and related fields, for this purpose having skills to formulate, select and apply appropriate methods.				
3	Having skills to apply modern design methods to design a complex system, process, equipment or product that should work under realistic conditions and constraints and satisfy specific requirements concerning the Electrical and Electronic Engineering.		X		
4	Having skills to develop, select and apply modern techniques and tools needed to analyze and solve complex applications in Electrical and Electronic Engineering, skills to use information technology effectively.				
5	Skills to design and conduct tests, collect data, analyze results, and interpret data for the experimental investigation of complex problems in Electrical and Electronic Engineering		X		
6	Ability to function effectively as an individual and as a member of teams within the discipline and in multidiscipline areas.			X	
7	Communicating effectively in oral and written form both in Turkish and English. Effective report writing and understanding written reports, preparing design and manufacturing reports, making effective presentations, skills to give and receive clear and concise instructions.			X	
8	Awareness of the necessity of lifelong learning, access to information, monitoring developments in science and technology and the ability to self-renewing				
9	Understanding of professional and ethical responsibility				
10	Information on project management, change management and risk management practices, awareness on entrepreneurship and innovation, knowledge on sustainable development.				
11	Information about universal and societal effects of engineering applications on health, safety and environment; awareness of the legal consequences of engineering solutions.				

Scale for assessing the contribution of the course to the program outcomes:

4: High 3: Medium 2: Low 1:None

Name of Instructor(s): Prof. Dr. Osman Parlaktuna

Signature(s):

Date: 02.03.2016