Name of the course	Code	Term	T+P	Credit	ECTS
Electronic Circuits			4+0	4	6

Prerequisites and co-requisities	

Language of the course	Turkish
Type of the course	Technical Elective
Course Coordinator	
Name of Lecturers	
Assistants	
Aim and goals of the course	The general aim of our course is; introducing the elements of electric and electronic circuits that computer engineering student would meet and by providing them to understand the basic working principles of circuits, increase the analysis and design abilities of the students.
Course Learning Outcomes	**Upon successful completion of the course, the students will be able to :** 1. Analyze electrical circuits using with various circuit analysis methods and circuit theorems 2. Calculate the power absorbed by a circuit element using the passive sign convention. 3. Identify diodes, BJTs, FETs and OP-AMPS and DC and AC analyze methods. 4. Use Ohm's law to solve electric circuits 5. Realize fundemental logic gates with using Diode, BJT, MOSFET technologies.
Contents of the course	Introduction: Basic Concepts / Circuit Analysis / Active and Passive Circuit Elements / Semiconductors / Bipolar Field Effect transistor / Transistor DC Models / Working Point Stability / Small Signal AC Models / Amplifier Common Frequency Response / Amplifier Common Frequency Response and Operational Amplifiers / Analog-Digital Converter

Weeks	Subjects
1	Introduction: Basic Concepts
2	Circuit Analysis
3	Circuit Analysis
4	Active and Passive Circuit Elements
5	Introduction to sinusoidal analysis.
6	Semiconductors
7	Bipolar Field Effect Transistor
8	MIDTERM
9	Transistor DC Models
10	Work Point Stability
11	Small Signal AC Models
12	Amplifier Common Frequency Response and Operational Amplifiers
13	Analog-to-Digital Converter
14	Digital-to-Analog Converter
15	FINAL EXAM

General Qualifications
In evaluations, it will be effective for students to apply the circuits they learn about electronic circuits with circuit design.
References
1. M. Fogiel. Fogiel,The essentials of electric circuits ISBN. 0-87891-585-0 2. James W. Nilsson, Susan A. Riedel, Introduction to PSpice. Supplement to Electric circuits, 4th edition 1994 ISBN. 975786045X 3. Electric circuits fundamentals / Thomas L. Floyd. 1998 ISBN. 013835166X 4. Introduction to electric circuits, Richard C. Dorf. 2001 ISBN.0471386898

5. Principles of electric circuits, Thomas L. Floyd. 2000 ISBN.0130959979
6. Electric circuits, James W. Nilsson, Susan A. Riedel. 2001 ISBN.0130321206
7. Jacob Millman, “Microelectronics”, McGraw-Hill
8. J. Millman, C. Halkias “Integrated Electronics”, McGraw-HillA. S.Sedra-K. C. Smith, “Microelektronic Circuits”, Oxford Univ. Press Internet

Evaluation

Midterm Exam: % 40, Final Exam: % 60. Project or homework evaluations can be made at the beginning of the semester.