

Electronic Circuits Elektronik Devreler

Prof. Nizamettin AYDIN

naydin@yildiz.edu.tr

<http://www.yildiz.edu.tr/~naydin>

Dr. Gökhan Bilgin

gokhanb@ce.yildiz.edu.tr

1

Course Details

- Course Code : 0112622
- Course Name: Electronic Circuits
(Elektronik Devreler)
- Instructor : Nizamettin AYDIN
Gökhan BİLGİN

2

Assesment

- Midterm 1 : 20%
- Midterm 2 : 20%
- Homework : 20%
- Final : 40%

3

Course Outline

ELECTRICAL CIRCUITS AND COMPONENTS

Basic Electrical circuits and components, Measurement of Voltages and Currents, Resistance and DC Circuits, Capacitance and Electric Fields, Inductance and Magnetic Fields, Alternating Voltages and Currents, Power in AC Circuits, Frequency Characteristics of AC Circuits, Transient Behaviour

ELECTRONIC SYSTEMS

Electronic Systems, Sensors, Actuators, Amplification, Control and Feedback, Operational Amplifiers

SEMICONDUCTOR DEVICES AND CIRCUITS

Semiconductors and Diodes, Diode Applications, Bipolar Junction Transistors, Field-effect Transistors, Power Electronics, Operational Amplifiers, Digital Systems

4

Some recommended books...

- **Electronic Devices and Circuit Theory** by Robert L. Boylestad and Louis Nashelsky
- **Electronics - A Systems Approach** by Neil Storey
- **Electronic Circuits - Fundamentals & Applications** by Michael H. Tooley
- **The Art of Electronics** by Paul Horowitz and Winfield Hill
- **Schaum's Outline of Electronic Devices and Circuits** by Jimmie J. Cathey
- **Electronic Devices and Circuits** by Theodore F. Bogart, Jeffrey S. Beasley, and Guillermo Rico

5

...Some recommended books

- **Electronic Devices and Circuits: Discrete and Integrated** by Denton J. Dailey
- **Electronics Fundamentals: Circuits, Devices & Applications** by Thomas L. Floyd and David Buchla
- **Electronic Devices and Circuits I** by A.P.Godse and U.A.Bakshi
- **Electronic Devices: Circuits and Applications** by William D. Stanley
- **Electronic Devices and Circuits** by David A. Bell
- **Microelectronic Circuits** by Adel Sedra and Kenneth Smith

6