



Introduction to Electrical Engineering

Lecture 2



YILDIZ TECHNICAL UNIVERSITY (YTU) (1911-2013)



Chronology

Kondüktör Mekteb-i Alisi	(1911-1922)
Nafia Fen Mektebi	(1922-1937)
Yıldız Teknik Okulu	(1937-1969)



Chronology (cont.)

İstanbul Devlet Mühendislik ve Mimarlık Akademisi (İDMMA)	(1969-1982)
Yıldız Üniversitesi	(1982-1992)
Yıldız Teknik Üniversitesi	(1992-)



Introduction to Electrical Engineering



Memories from graduates of 1929 summer term



Facts in Brief

- Over 30.000 students
- About 1.600 academicians
- Academic Units
 - 10 faculties
 - 2 institutes
 - 3 colleges
 - 4 departments
 - 15 research center
- 3 campuses



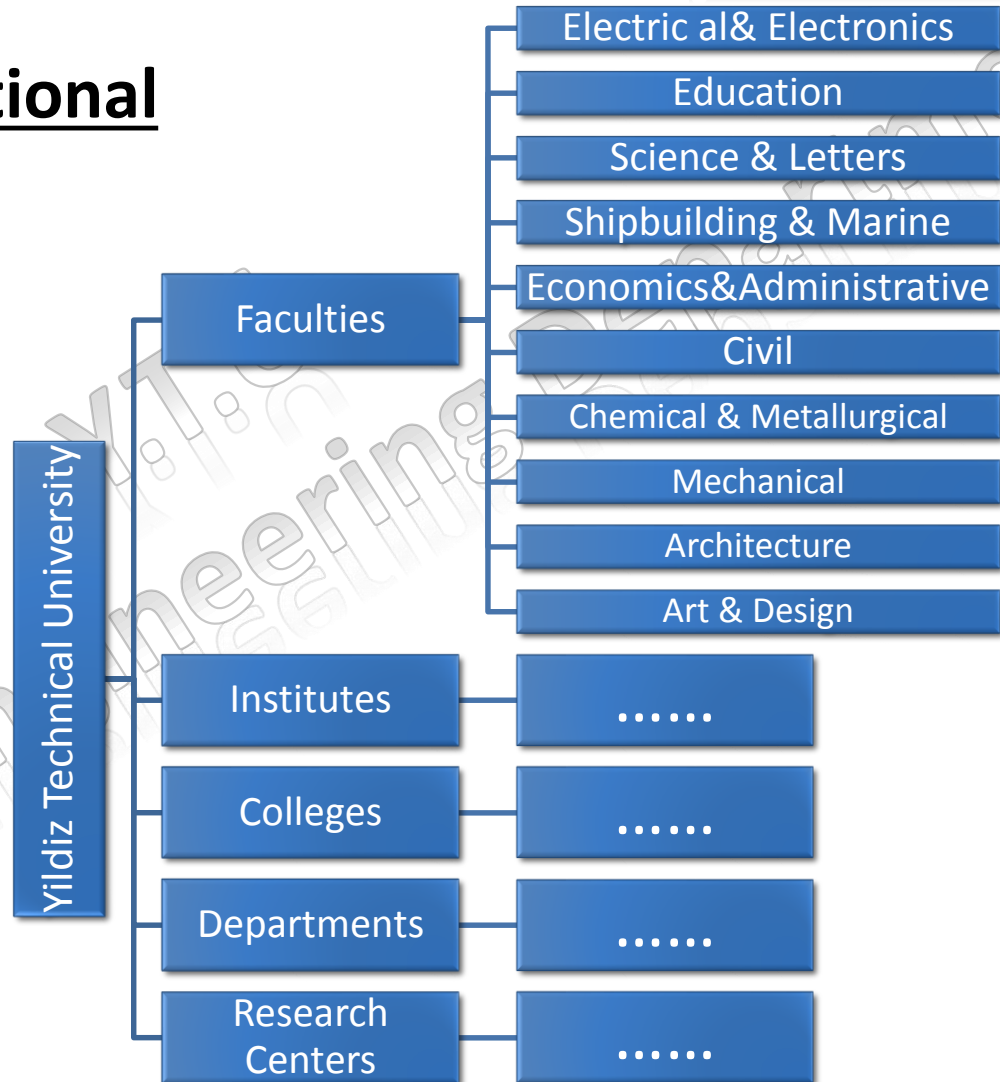
Campuses

- Yıldız (center)
- Davutpaşa
- Gaziosmanpaşa





Academic Organizational Structure





Introduction to Electrical Engineering

Electrical-Electronics Faculty



Yıldız Campus

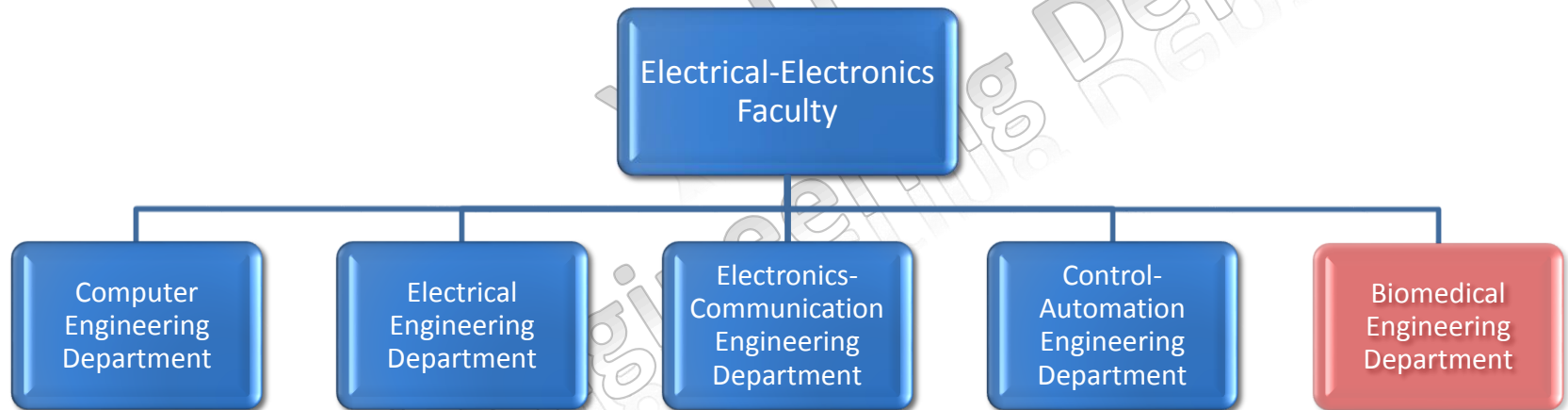
2011



Davutpaşa Campus



Departments of Electrical and Electronics (ECE) Faculty





Electrical Engineering (EE) Department

Vision

To become an engineering department which is preferred internationally in the science, education and research fields



Mission

To become an engineering department which educates engineers who are ;

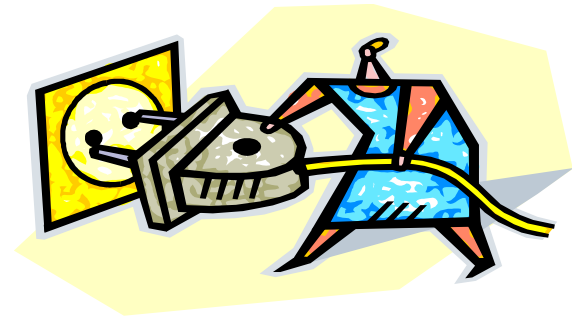
- constantly updating themselves,
- able to make synthesis&analysis
- creative
- entrepreneur
- questioner
- acquainted with ethic values
- prone to team work
- gained with acknowledgement and experience at the int. level





Facts at a Glance on EE Department (2016-2017)

- 1408 undergraduate students (day&night school)
- 385 graduate students (master&phd program)
- 33 academicians+21 assistants
- 3 divisions



History of EE Department

- Started to educating under Mechanical Engineering Department in 1942-1943
- First graduates in 1946 (only 8 graduates)
- Started night technical school in 1958-1959
- Started graduate education in 1959-1960
- Founded EE Department 1969



History of EE Department (cont.)

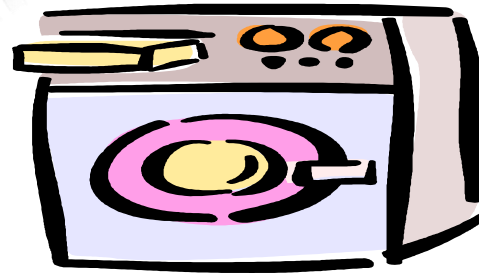
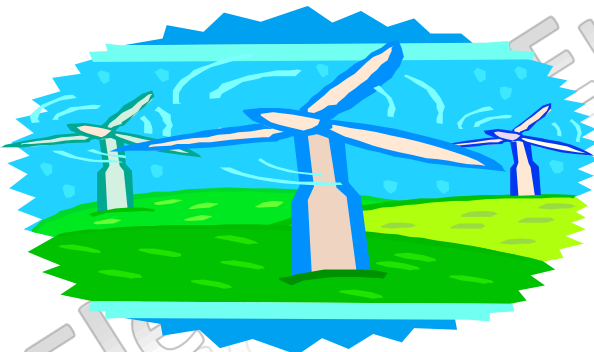
Education system in initial

- Mainly electromechanical syllabus
- 8 semesters with 18 weeks
- 42 hours a week (including Saturday)
- 3 summer internships with 6 weeks



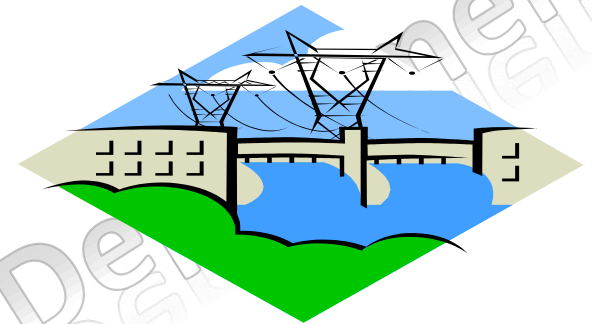
Divisions of EE Department

- Power Systems
- Electric Machines
- Alternative Energy Systems



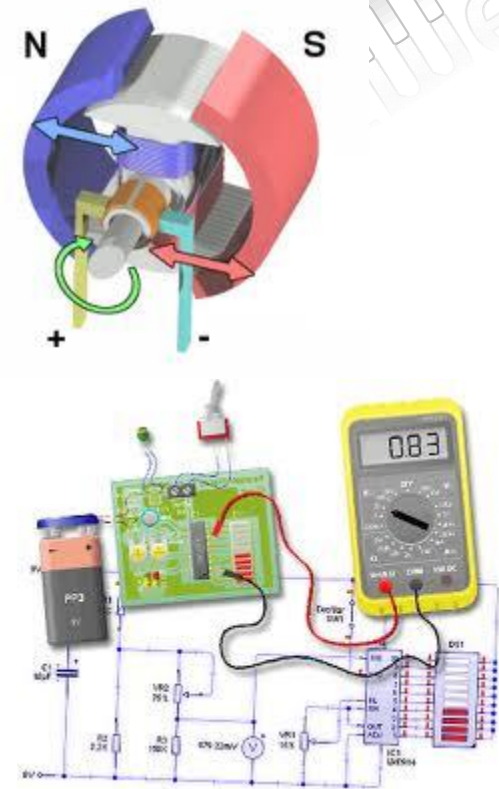
Power Systems Division

- Electrical energy production
- Electrical energy transmission
- Electrical energy distribution
- High voltage technique
- Illumination (lighting)
- Power Quality



Electric Machines Division

- Electric machine theory
- Electric machine design
- Special electric machines
- Power electronics
- Electric machine control



Alternative Energy Systems Division

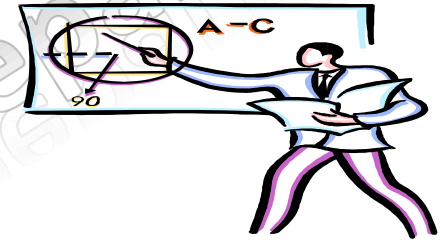
- Renewable energy sources (solar, wind etc.)
- Smart grids
- Hybrid vehicles





Academic Staff

- 7 professors (Prof.)
- 6 associate professors (Assoc. Prof.)
- 16 assistant professors (Asst. Prof.)
- 4 instructors (Instr.)
- 21 research assistants (Res. Asst.)





Academic Staff (cont.)

Power Systems Division

Prof Dr. Selim Ay
Prof. Dr. Nurettin Umurkan
Assoc. Prof. Dr. F. Okan Pekiner
Assoc. Prof. Dr. Aslan İnan
Assoc. Prof. Dr. U. Savaş
Selamoğulları
Assoc. Prof. Dr. Ercan İzgi
Assoc. Prof. Dr. Recep Yumurtacı
Asst. Prof. Dr. Adem Ünal
Asst. Prof. Dr. Erdin Gökalp

Asst. Prof. Dr. Selim Trabulus
Asst. Prof. Dr. Oktay Arıkan
Asst. Prof. Dr. Altuğ BOZKURT
Asst. Prof. Dr. Bora Acarkan
Instr. Dr. Ahmet Özdeş
Instr. Yavuz Ateş
Instr. Alpaslan Demirci



Academic Staff (cont.)

Power Systems Division

Res. Asst. Dr. Ali Rıfat Boynueğri

Res. Asst. Kadir Doğanşahin

Res. Asst. Dr. Ali Durusu

Res. Asst. Ali Ajder

Res. Asst. Dr. Celal Fadıl Kumru

Res. Asst. Ramazan Ayaz

Res. Asst. Dr. Onur Elma

Res. Asst. Enes Uğur

Res. Asst. Hakan Akça

Res. Asst. S. Mirza TERCAN



Academic Staff (cont.)

Electric Machines Division

Prof. Dr. Hacı Bodur

Prof. Dr. İbrahim Şenol

Prof. Dr. M. Hadi Sarul

Assoc. Prof. Dr. A. Faruk Bakan

Assoc. Prof. Dr. Nur Bekiroğlu

Asst. Prof. Dr. M. Salih Taci

Asst. Prof. Dr. A. Hülya Obdan

Asst. Prof. Dr. Sibel Zorlu Partal

Asst. Prof. Dr. Burak Akın

Asst. Prof. Dr. Nihan Altıntaş

Asst. Prof. Dr. Engin Ayçiçek

Asst. Prof. Dr. Selin Özçıra

Asst. Prof. Dr. Yasemin Öner

Instr. Dr. Mustafa Gürkan Aydeniz



Academic Staff (cont.)

Electric Machines Division

Res. Asst. Erdem Akboy

Res. Asst. Ahmet Yiğit Arabul

Res. Asst. Yusuf YAŞA

Res. Asst. Özgün GİRGIN

Res. Asst. Ali AĞÇAL

Res. Asst. Fatma Keskin Arabul



Academic Staff (cont.)

Alternative Energy Systems Division

Assoct. Prof. Dr. Ozan Erdiñ

Asst. Prof. Dr. İsmail Nakir

Asst. Prof. Dr. Bedri Kekezoğlu

Res. Asst. Hasan Can KILIÇKIRAN

Res. Asst. İbrahim Şengör

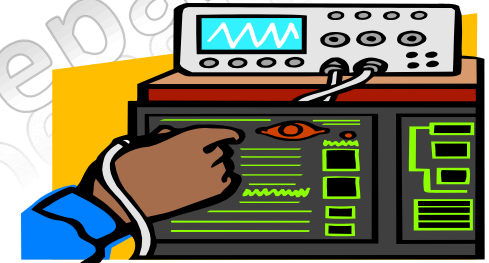
Res. Asst. Hüseyin Akdemir

Res. Asst. Ayşe Kübra Erenoğlu

Laboratories

Training Labs

- Electrical Circuit & Illumination Lab
- Power Systems Lab
- Electric Machines Lab
- Power Electronics & Electrical Machines Control Lab
- Instrumentation & Control Lab
- High Voltage Lab



Laboratories (cont.)

Research Labs

- High Current Lab
- Power Electronics Lab
- Instrumentation & Control Lab
- Robotic Lab
- Alternative Energy Technologies Lab
- Power Quality & SCADA Lab
- Energy Efficiency & Renewable Energy Sources lab



Internships

- General Internship
- Occupational Internship
- 30 working days (each)

