

Power Systems Specialization Track
Department of Electrical and Computer Engineering
Ben-Gurion University of The Negev

March 2, 2008

Objectives:

The main objective of the Power Systems specialization track is to provide the student with a good theoretical and practical basis, which should enable him/her to deal with complexity, abstraction and with unforeseen technological changes. This basis should prepare him/her for future education.

The student's training starts by learning the basics of Power Systems field, with its different aspects and directions: generation, transmission, and distribution of electric energy; power rectifiers and inverters; electric drive systems, starting and speed adjustment.

The graduate engineer with Power Systems specialization track is supposed to work in power stations, transmission and distribution networks, design (including the private market but also large project companies), marketing, research and development (e.g., industrial electronics control of electric drive systems or electric power flow).

Power Systems Track Curriculum

Core Curriculum
The student needs to take all the basic mathematics and electrical engineering courses. The following courses are specifically related to the Power Systems track: Introduction to Energy Conversion Laboratory of Energy Conversion Introduction to Control Introduction to Signal Processing
Power Systems Track
Mandatory Courses: The student is required to take the following courses to be enrolled in the Israeli Electrical Engineers Register, Electricity (Power Systems) Chapter : Power Systems 1 Power Systems 2 Electric Drives Industrial Electronics Laboratory in Industrial Electronics Final Project in Power Systems
Elective Courses: The students are encouraged to take the following courses: Thermodynamics 1 Economic Principles of Power Systems

The following site was developed by IEEE (free, open to public) to attract students to the Power Systems field:

Power Engineering: Careers that make technology work - This program provides an overview of career possibilities in Power Engineering. In this program professionals discuss the nature of their work.

Shortcut to: <http://www.ieee.org/web/membership/IEEEtv/about.html>