

Title Modern technologies of improvement of quality supply	Code 1010312321010320948
Field Power engineering	Year / Semester 1 / 2
Specialty -	Course core
Hours Lectures: 1 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 0
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course, Faculty of Electrical Engineering, field Power Engineering.

Assumptions and objectives of the course:

Theoretical knowledge of propriety and basic characteristics of power electronics systems to improvement of the quality and flexible transmission of electrical energy.

Contents of the course (course description):

Characterization of disturbances on power network. Features and possibilities of power electronics systems to control of parameters of power network. LC Passive systems. Chokes and condensers controlled and switched systems. STATCOM and SSSC systems. Active and hybrid series and shunt filters. Methods of identification of filtered currents and voltage component. Drivers of active filtration systems. Unified Power Flow Controller UPFC. Interline Power Flow Controller IPFC. Flexible reliable intelligent electrical energy delivery system FRIENDS.

Introductory courses and the required pre-knowledge:

Basic knowledge about electrical engineering, electronics and power electronics.

Courses form and teaching methods:

Lectures.

Form and terms of complete the course - requirements and assessment methods:

Written examination.

Basic Bibliography:

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Additional Bibliography:

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