# **Faculty of Electrical Engineering**

Title (Chemia)	Code 1010311311010710893
Field Power Engineering	Year / Semester
Specialty -	Course
Hours Lectures: 2 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 3
, and the second	Language polish

Lecturer:

prof. dr hab. Andrzej Lewandowski

Instytut Chemii i Elektrochemii Technicznej

Faculty:

Faculty of Electrical Engineering

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## Status of the course in the study program:

Basic

#### Assumptions and objectives of the course:

General aim of the course is knowledge of basic chemical rules such as: chemical equilibrium, energetics of chemical reaction, kinetics.

#### Contents of the course (course description):

Chemical thermodynamics, reaction equilibrium, energy exchanged during chemical reaction. Kinetics of reaction - order, activation energy. Explosion and stationary reaction. basic electrochemistry. Corrosion. Fuels (fossil and synthetic). Cionversion of solid and gas fuels to liquid ones. Cooling fluids (especially water) for heat engines.

## Introductory courses and the required pre-knowledge:

basic knowledge of chemistry.

#### **Courses form and teaching methods:**

Lecture (with the help of audio visual technique). Chemical laboratory practise.

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

Obligatory minimum of laboratory practice together with an oral discussion.

## **Basic Bibliography:**

**Additional Bibliography:**