

Title (Chemia budowlana)	Code 1010104131010710654
Field Civil Engineering Extramural First-cycle Studies	Year / Semester 2 / 3
Specialty -	Course core
Hours Lectures: 3 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 3
	Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

-Chemistry of building materials

Assumptions and objectives of the course:

-The main of the course is to get to know physico-chemical properties of building materials and protection methods.

Contents of the course (course description):

-Atomic structure. Chemical bonds. Acidic scale of solutions. Salts hydrolysis. Water hardness. Red-ox potential, galvanic series. Corrosion of metals and corrosion protection. Surface phenomena, wettability, surfactants. Silicates and aluminosilicates. Binding agents. Corrosion of stone materials and corrosion protection. Building glass, timber and plastics.

Introductory courses and the required pre-knowledge:

-Basic knowledge of chemical formulas and reactions of building materials.

Courses form and teaching methods:

-Lectures, laboratory

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

-Two writing tests:
1 - in the middle of lectures ? corrosion (electrochemical reactions)
2 - in the end of lectures ? formulas and properties of plastics

Basic Bibliography:

Additional Bibliography: