
Course title: SEWAGE TREATMENT PLANTS AND ENVIRONMENT PROTECTION IN ENERGY INDUSTRY

ECTS credit allocation (and other scores): 2

Semester: autumn

Level of study: ISCED-6 - first-cycle programmes (EQF-6)

Branch of science: Engineering and technology

Language: English

Number of hours per semester: 30

Course coordinator/ Department and e-mail: Wojciech Rejmer, Department of Machines and Materials Technology.

Type of classes: classes and lectures

Substantive content

CLASSES: water physical - chemical properties, water hardness determination, determination of soil sorption properties, measurement of metal content in water and soil, determination of organic compounds in industrial waste

LECTURES: environment protection, pollution types, air pollution, water pollution, soil pollution, environmental catastrophes, methods of thermal polymer recycling.

Learning purpose: Provide students with knowledge of waste and environmental hazards in energy production industry

On completion of the study programme the graduate will gain:

Knowledge: Knowledge of types on environmental pollutants and their health hazards

Skills: Ability perform simple test of water soil and air pollution

Social Competencies: Awareness of health and safety regulations and engineers influence on society and environment

Basic literature: Nicholas Jenkins, Renewable Energy Engineering; Lucas Collins, Energy Technology Handbook;

Supplementary literature: Stanislav Patin, Environmental Impact of the Offshore Oil and Gas Industry

Contact hours with an academic teacher: 30

Student's independent work: 20