



Faculty of Geoengineering

Course title: ENGINEERING PROJECT

ECTS credit allocation (and other scores): 4.0

Semester: spring

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

Branch of science: Engineering and technology

Language: English

Number of hours per semester: 45

Course coordinator/ Department and e-mail: dr inż. Artur Mielcarek/Department of Environmental Engineering;
artur.mielcarek@uwm.edu.pl

Type of classes: classes

Substantive content

CLASSES: Basic rules for the procedure of collecting documentation constituting the basis for starting design works. Analysis of current guidelines for the design of buildings with particular emphasis on sanitary installations. Principles of preparing graphic documentation. Principles of verification of project documentation. Conducting technological calculations and technical selection of devices. Use of specialized computer software for the execution of the drawing part of the project and hydraulic calculations. Examples of installation projects in a single-family and multi-family residential building.)

Learning purpose: Acquainted with the principles of creating technical documentation in the field of designing objects and installations used in environmental engineering.

On completion of the study programme the graduate will gain:

Knowledge: He knows the source works in the field of the problem being solved. He knows the rules of designing, making expert opinions, and a simple measurement experiment. He knows the methods of developing and interpreting the results. He knows the methodology of writing an engineering project and the presentation of the results. Knows the editorial rules for the preparation of an engineering project.

Skills: Selects appropriate methods and tools to achieve the goal of the engineering project. Is able to obtain the necessary data for the implementation of the engineering project. He uses various calculation methods. Is able to use source data to prepare a engineering project. He can present the assumptions and results of the engineering project. Has the ability to self-educate.

Social Competencies: Increases professional skills and uses them in independent and team work. He understands the importance of cooperation and using the achievements of others.

Basic literature:

1) Heidrich Z., Urządzenia do uzdatniania wody. Zasady projektowania i przykłady obliczeń, wyd. Arkady, 1987; 2) Chudzicki J., Sosnowski S., Instalacje kanalizacyjne-projektowanie, wykonanie, eksploatacja, wyd. Seidel-Przywecki W-wa, 2009; 3) Sosnowski S., Tabernacki J., Chudzicki J., Instalacje wodociągowe, kanalizacyjne, wyd. Instalator Polski W-wa, 2000; 4) Anasiewicz-Sompór E., Montusiewicz A., Projektowanie stacji uzdatniania wody i oczyszczalni ścieków: materiały pomocnicze od ćwiczeń projektowych. Projektowanie stacji uzdatniania wody, wyd. Wydawnictwa Uczelniane Politechniki Lubelskie, 1992

Supplementary literature:



1) Bąkowski K., Sieci i instalacje gazowe, wyd. Wydawnictwo Naukowe PWN, 2019

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 1.28

Student's independent work: 2.72