



Faculty of Geoengineering

Course title: TECHNICAL DRAWING WITH ELEMENTS OF DESCRIPTIVE GEOMETRY

ECTS credit allocation (and other scores): 2.0

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: 10/20

Course coordinator/ Department and e-mail: prof. dr hab. inż. Marcin Zieliński, dr inż. Anna Nowicka;
marcin.zielinski@uwm.edu.pl, anna.grala@uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: Classes are implemented in the form of drawing and design classes, during which students independently perform work on basic engineering issues occurring in technical drawing, including the application of technical drawing principles and standards in the development of technical documentation: machine elements, architectural and construction drawings and installation drawings. Axonometric projection.

LECTURES: The content of the lectures covers the basics of technical and construction drawing applicable to environmental engineering, the representation of spatial elements on the plane and the relations between them using layout and transformation. Student learns the basic knowledge of solids and their projection by the European method. Principles of dimensioning and use of graphic symbols in technical drawing, axonometry, drawing standards.

Learning purpose: Education aims to develop a spatial vision and the ability to develop and read technical documentation. Student learns the principles of making sketches and technical drawings used in environmental engineering

On completion of the study programme the graduate will gain:

Knowledge : Student knows the methods of unambiguous representation of three-dimensional geometric works on the drawing plane. Student knows the principles of making sketches and technical drawings used in environmental engineering.

Skills: Student knows the methods of representation of spatial works on the plane. Can, in accordance with current standards. European standards, represent and dimension machine parts and construction objects in the field of engineering environment. Student can also prepare simple technical documentation of building installations.

Social Competencies: Able to work in a team to develop technical documentation.



Basic literature: Henry Cecil Spencer , John Thomas Dygdon, James E. Novak, Basic Technical Drawing , 6th Edition, ISBN-10: 0026856603.

Supplementary literature: ---

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 32

Student's independent work: 24