# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name Computer-Aided Design [S2AW1>KWP]

Course			
Field of study Interior Design		Year/Semester 1/1	
Area of study (specialization)		Profile of study general academic	;
Level of study second-cycle		Course offered in Polish	
Form of study full-time		Requirements compulsory	
Number of hours			
Lecture 0	Laboratory classe 0	S	Other 0
Tutorials 0	Projects/seminars 45	;	
Number of credit points 3,00			
Coordinators		Lecturers	

#### **Prerequisites**

The student has in-depth knowledge of the principles of safe use of computer equipment and in the scope of design and graphic programs. The student is able to obtain information from literature, databases and other, properly selected sources, is able to integrate information, interpret it, as well as draw conclusions and formulate and justify opinions. The student is able to use computer equipment. The student correctly identifies and resolves dilemmas related to the performance of the profession

#### **Course objective**

The aim of the subject is to provide the basics of current knowledge: theoretical and practical in the field of computer-aided design. During the classes, the subject presents issues related to the interior designer's workshop using computer-aided design. The connection between theoretical and practical issues is shown based on examples of software use in specific design tasks illustrating the possibilities of contemporary digital instruments in order to improve the designer's work and achieve greater efficiency and quality of creative tasks performed in the context of the technical conditions of modern times.

#### **Course-related learning outcomes**

none

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Systematic assessment of progress through reviews conducted at announced dates.

Assessment of the final project work A summary assessment of work in the semester – average of the grades from reviews and the final work. The adopted scale of grades: 2.0; 3.0; 3.5; 4.0; 4.5; 5.0.

## Programme content

During the exercises, advanced computer modeling methods are presented based on modeling and visualization applications.

The issues of three-dimensional scanning in the context of interior modeling and design will be introduced.

### **Course topics**

The importance of digital analysis methods as an essential element of decision support in the design process is discussed.

Particular emphasis is placed on indicating the role played by the visual presentation of design work in the context of design and utility graphics. Attention is also drawn to the important role played by information technology in the field of 3D scanning and design data exchange.

Individual issues are discussed using examples of specific design applications, which is the basis for students' own creative explorations, in direct reference to the exercises in the subject.

### **Teaching methods**

Demonstration and presentation method: presentation of phases of practical activities and methods with explanation

Project method; implementation of a cognitive/practical task, the effect of which is the creation of a work Experiment and observation method

### Bibliography

Basic

1. Gawrysiak P.; Digital Revolution. Development of information civilization, PWN Scientific Publishing House S.A., Warsaw 2008

2. Januszkiewicz K. "On designing architecture in the era of digital tools. Current status and development prospects." Pwr. Publishing House, Wrocław 2010

3. Tomana A.: BIM. Innovative technology in construction, Krakow 2015 Supplementary

1. Austin T., Doust R.; Design for new media, PWN Scientific Publishing House, Warsaw 2008

2. Deutsch R., BIM and integrated design, Strategies for architectural practice., IAI, Wiley 2011

3. Siewczynski B., Architectural design graphics and digital nostalgia, Siewczyński Borys, "Arche and Psyche": Scientific and Research Seminar of the Department of Urban and Spatial Planning WAPP. Collective work ed. R Ast, Poznań 2014.

4. Application of terrestrial laser scanning technology, collective work, Publishing House of Warsaw University of Technology, Warsaw 2017

### Breakdown of average student's workload

	Hours	ECTS
Total workload	0	0,00
Classes requiring direct contact with the teacher	0	0,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	0	0,00