

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Engineering Drawing and CAD		Code 1010101221010134899
Field of study Environmental Engineering First-cycle Studies	Profile of study (general academic, practical) general academic	Year /Semester 1 / 2
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: - Classes: - Laboratory: - Project/seminars: 30		No. of credits 2
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 2 100% 2 100%
Responsible for subject / lecturer: dr inż. Fabian Cybichowski email: fabian.cybichowski@put.poznan.pl tel. 665 24 14 Faculty of Civil and Environmental Engineering ul. Piotrowo 5 60-965 Poznań		Responsible for subject / lecturer: dr inż. Julian Skiba email: julian.skiba@put.poznan.pl tel. 61 6652078 Faculty of Civil and Environmental Engineering ul. Piotrowo 5 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge about Windows operating system.
2	Skills	Ability to use PC and Windows operating system.
3	Social competencies	Awareness of the need to constantly update and supplement knowledge and skills.
Assumptions and objectives of the course: Learning the skills necessary to prepare 2D drawings using AutoCAD.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Basic and intermediate knowledge about AutoCAD interface - [K_W07] 2. Different methods of data input during object drawing - [K_W07] 3. Methods of modifying objects - [K_W07] 4. How to create and modify layers - [K_W07] 5. Methods of precise drawing - [K_W07] 6. Additional commands for navigating and creating drawings - [K_W07] 7. Knowledge about basic program preferences - [K_W07] 8. How to add and edit comments - [K_W07] 9. How to add and edit dimensions - [K_W07] 10. How to print - [K_W07]		
Skills:		

1. Using program interface - [K_U01] 2. Drawing and modifying objects - [K_U01] 3. Working with layers - [K_U01] 4. Using different tools for precision drawing - [K_U01] 5. Using additional tools for working with drawings - [K_U01] 6. Editing program preferences - [K_U01] 7. Adding and editing comments - [K_U01] 8. Adding and editing dimensions - [K_U01] 9. Printing - [K_U01]
Social competencies:

Assessment methods of study outcomes		
Test drawings during the course.		
Course description		
Basics of using AutoCAD: program interface, working with 2D drawings, coordinates, layers, drawing and modifying objects, comments, dimensions, additional tools, printing, changing preferences.		
Basic bibliography:		
1. Andrzej Pikoń AutoCAD 2006 i 2006 PL Helion Gliwice 2006 2. Andrzej Pikoń AutoCAD 2007 PL Helion Gliwice 2007		
Additional bibliography:		
1. Janusz Graf AutoCAD 2005 i 2005 PL. Ćwiczenia praktyczne. Helion Gliwice 2005 2. Mirosław Babiuch AutoCAD 2007 i 2007 PL. Ćwiczenia praktyczne. Helion Gliwice 2007		
Result of average student's workload		
Activity	Time (working hours)	
1. Participation in classes	30	
2. Additional assignments	15	
Student's workload		
Source of workload	hours	ECTS
Total workload	50	2
Contact hours	30	1
Practical activities	50	1