



Subject card

| | | | | | | | |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|
| Subject name and code | Computer Aided Design (CAD), PG_00042892 | | | | | | |
| Field of study | Environmental Engineering | | | | | | |
| Date of commencement of studies | October 2021 | Academic year of realisation of subject | | | 2022/2023 | | |
| Education level | first-cycle studies | Subject group | | | Obligatory subject group in the field of study Subject group related to scientific research in the field of study | | |
| Mode of study | Full-time studies | Mode of delivery | | | at the university | | |
| Year of study | 2 | Language of instruction | | | Polish | | |
| Semester of study | 4 | ECTS credits | | | 2.0 | | |
| Learning profile | general academic profile | Assessment form | | | assessment | | |
| Conducting unit | Faculty of Civil and Environmental Engineering | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | dr inż. Witold Tisler | | | | | |
| | Teachers | dr inż. Paweł Więclawski dr inż. Witold Tisler dr inż. Jakub Konkol dr inż. Krzysztof Szarf | | | | | |
| Lesson types and methods of instruction | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 0.0 | 0.0 | 30.0 | 0.0 | 0.0 | 30 |
| | E-learning hours included: 0.0 | | | | | | |
| Learning activity and number of study hours | Learning activity | Participation in didactic classes included in study plan | Participation in consultation hours | | Self-study | | SUM |
| | Number of study hours | 30 | 5.0 | | 20.0 | | 55 |
| Subject objectives | The Computer Aided Design course is designed to teach students the basics of working in AutoCAD. During the course, the most important functions of the program will be discussed, such as: drawing, modification of objects, hatching or preparation of a drawing for printing. | | | | | | |
| Learning outcomes | Course outcome | Subject outcome | | | Method of verification | | |
| | [K6_W16] knows the rules of descriptive geometry and technical drawing regarding the recording and reading of architectural drawings, construction and surveying drawings, as well as their preparation with the use of CAD | Knows the rules of drafting technical drawings. Knows the rules of descriptive geometry Has the knowledge to draft technical drawings according to the aforementioned rules Knows how to draw in AutoCAD. | | | [SW1] Assessment of factual knowledge | | |
| | [K6_U11] can use selected computer programs to support design, including CAD graphics programs | Can prepare technical drawings using AutoCAD. | | | [SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment | | |
| | [K6_U07] can read architectural, construction and geodesy drawings, and can use the known computer programs to prepare a drawing part of technical documentation for the sanitary industry | Student can read a civil engineering or a sanitary engineering technical drawing Student is able to use AutoCAD software to create a technical drawing. | | | [SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment | | |

| | | | |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Subject contents | Learning how to use Autodesk AutoCAD Drawing of basic elements Modification of the elements already drawn Precision Layers Properties Printing Introduction to 3D drawing | | |
| Prerequisites and co-requisites | Classes taught in the previous semesters: descriptive geometry, technical drawing. Knowledge of technical drawing rules. How to use Windows OS. Polish proficiency. | | |
| Assessment methods and criteria | Subject passing criteria | Passing threshold | Percentage of the final grade |
| | Attendance | 100.0% | 20.0% |
| | Test (prepare a drawing) | 50.0% | 80.0% |
| Recommended reading | Basic literature | 1. AutoCAD help files 2. http://knowledge.autodesk.com/support/autocad/learn-explore/3 . Andrzej Pikoń: AutoCAD. Pierwsze kroki. Helion. 4. Andrzej Jaskólski: AutoCad. Kurs projektowania parametrycznego i nieparametrycznego w 2D i 3D. PWN. | |
| | Supplementary literature | any AutoCAD manual | |
| | eResources addresses | Adresy na platformie eNauczanie: | |
| Example issues/ example questions/ tasks being completed | Final test consists of redrawing a given figure and performing a number of specific tasks such as adding dimensions or printing the figure | | |
| Work placement | Not applicable | | |