



## Subject card

|   |  |  |                      |                                     |  |            |     |
|---|--|--|----------------------|-------------------------------------|--|------------|-----|
| Subject name and code                       | Practice environmentally-geodesic, PG_00054662   |  |                      |                                     |  |            |     |
| Field of study                              | Environmental Engineering  |  |                      |                                     |  |            |     |
| Date of commencement of studies             | October 2021   | Academic year of realisation of subject                  |                      |                                     | 2021/2022  |            |     |
| Education level                             | first-cycle studies  | Subject group  |                      |                                     | Obligatory subject group in the field of study<br>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                               | 1  | Language of instruction                                  |                      |                                     | Polish   |            |     |
| Semester of study                           | 2  | ECTS credits   |                      |                                     | 2.0  |            |     |
| Learning profile                            | general academic profile   | Assessment form  |                      |                                     | assessment   |            |     |
| Conducting unit                             | Department of Environmental Engineering Technology -> Faculty of Civil and Environmental Engineering   |  |                      |                                     |  |            |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor   |  | dr inż. Alina Wargin |                                     |  |            |     |
|   | Teachers   |  |                      |                                     |  |            |     |
| Lesson types and methods of instruction     | Lesson type  | Lecture  | Tutorial             | Laboratory                          | Project  | Seminar    | SUM |
|   | Number of study hours  | 2.0  | 0.0                  | 0.0                                 | 13.0   | 0.0        | 15  |
|   | E-learning hours included: 0.0   |  |                      |                                     |  |            |     |
|   | Adresy na platformie eNauczanie:   |  |                      |                                     |  |            |     |
| 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  | 15   |                      | 10.0                                |  | 25.0       | 50  |
| Subject objectives                          | The aim of the internship is to enable students to use the acquired knowledge in practice through their participation in geodetic measurements. Additionally, the classes are aimed at using the results obtained during the measurements to prepare a design study. |  |                      |                                     |  |            |     |

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| Learning outcomes  | Course outcome   | Subject outcome  | Method of verification  |
|  | [K6_U03] can prepare documentation regarding the implementation of an engineering task/project and prepare a text or presentation including a discussion of the results of the implementation  | Preparation of measurement documentation, development of measurement results. Execution of cross-sections and longitudinal sections of the measured section of the Jelitkowski Stream  | [SU1] Assessment of task fulfilment   |
|  | [K6_U02] can work individually and in a team; knows how to estimate the time needed to complete the task ordered; is able to develop and implement a work schedule that ensures deadlines  | Planning and carrying out measurements in the measurement group. Assigning tasks and responsibilities for each person in the team  | [SU3] Assessment of ability to use knowledge gained from the subject<br>[SU1] Assessment of task fulfilment |
|  | [K6_W17] has basic knowledge of geodesy in the range of applied measurement equipment and techniques, geodetic information systems and documentation necessary in the preparation process, investment implementation   | Planning and carrying out simple geodetic measurements. Measurement of the fall of the water table in Potok Jelitkowski. Preparation of relevant documentation.  | [SW3] Assessment of knowledge contained in written work and projects  |
|  | [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  | He can prepare technical documentation related to the development of the results of conducted field measurements in accordance with the rules.   | [SW3] Assessment of knowledge contained in written work and projects  |
| [K6_U05] can apply in engineering practice the basic geodetic instruments and instruments, make measurement sketches and read information from the map and surveying documents | Performing a leveling measurement with the use of self-leveling levels. Preparation of leveling sketches and measurement logs  | [SU4] Assessment of ability to use methods and tools<br>[SU1] Assessment of task fulfilment  |   |
| Subject contents   | Altitude measurement, assumption of the (altitude) measurement network, measurement of the water table drop in the Jelitkowski Stream, execution of the leveling line with connection to the national network. preparation of documentation on the basis of the performed measurement, execution of cross-sections and longitudinal sections of the measured object, determination of the value of the bottom slope and the water table. In addition, students will be familiarized with the basic issues in the field of broadly understood environmental protection, as well as with the processes taking place in industrial plants, such as the Sewage Treatment Plant and Waste Disposal Plant. |  |   |
| Prerequisites and co-requisites  |  |  |   |
| Assessment methods and criteria  | Subject passing criteria   | Passing threshold  | Percentage of the final grade   |
|  | Conversation   | 60.0%  | 70.0%   |
|  | Report   | 60.0%  | 30.0%   |
| Recommended reading  | Basic literature   | <ul style="list-style-type: none"> <li>Praca zbiorowa. Ćwiczenia z geodezji pod redakcją Adama Żurowskiego. Gdańsk, Politechnika Gdańska.</li> <li>Przewłocki, S., Żurowski, A. (2006). Przewodnik do ćwiczeń z geodezji inżynierskiej. Kutno, Wyższa Szkoła Gospodarki Krajowej.</li> </ul> |   |
|  | Supplementary literature   | <ul style="list-style-type: none"> <li>Kurałowicz Z., (2009) Geodezja Podstawowe obliczenia Geodezyjne, Gdańsk, Politechnika Gdańska</li> </ul>  |   |
|  | eResources addresses   |  |   |

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| <p>Example issues/<br/>example questions/<br/>tasks being completed</p> | <p>Development of longitudinal sections of the river bed</p> <p>Development of river bed cross-sections</p> <p>Overview of the method of measuring the leveling of the river bed</p> <p>Overview of the method of calculating measurement data obtained during the course</p> <p>Environmental degradation<br/>Forms of natural and anthropogenic environmental devastation<br/>Institutions dealing with nature protection in Poland</p> |
| <p>Work placement</p>   | <p>Not applicable</p>   |