

## 关。GDAŃSK UNIVERSITY 多 OF TECHNOLOGY

## Subject card

| Subject name and code                       | General Building Technology II, PG_00055578  |  |  |                                     |                        |   |         |   |
|---|--|--|--|-------------------------------------|------------------------|---|---------|---|
| Field of study                              | Architecture   |  |  |                                     |                        |   |         |   |
| Date of commencement of studies             | October 2024   |  | Academic year of<br>realisation of subject   |                                     |                        | 2024/2025   |         |   |
| Education level                             | first-cycle studies  |  | Subject group  |                                     |                        | Obligatory subject group 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   |                                     |                        | 3.0   |         |   |
| Learning profile                            | general academic profile   |  | Assessment form  |                                     |                        | assessment  |         |   |
| Conducting unit                             | Department of Techn  | Department of Technical Fundamentals of Architecture Design -> Faculty of Architecture |  |                                     |                        |   |         |   |
| Name and surname<br>of lecturer (lecturers) | Subject supervisor   |  | dr inż. arch. Bogusława Konarzewska  |                                     |                        |   |         |   |
|   | Teachers   |  | dr inż. arch. Bogusława Konarzewsł   |                                     |                        | a   |         |   |
| Lesson types and methods of instruction     | Lesson type  | Lecture  | Tutorial   | Laboratory                          | aboratory Project      |   | Seminar | SUM   |
|   | Number of study hours  | 15.0   | 30.0   | 0.0                                 | 0.0                    |   | 0.0     | 45  |
|   | E-learning hours inclu   | uded: 0.0  |  |                                     |                        |   |         |   |
| Learning activity and number of study hours | Learning activity  | Participation in<br>classes includ<br>plan   |  | Participation in consultation hours |                        | Self-study  |         | SUM   |
|   | Number of study hours  | 45   |  | 5.0                                 |                        | 25.0  |         | 75  |
| Subject objectives                          | The aim of the course is to introduce student to basics of general building technology, in the field of knowledge of building land and groundwater, earthworks, designing foundations and walls, floorslabs. During the course students also get acquainted with types of loads acting on the building, structural systems of buildings and the definition existing in the Construction Law related to the above issues. The aim of the course is also to become familiar with and acquire the skills of drawing and reading and drawing architectural and construction drawings: sections, plans etc.   |  |  |                                     |                        |   |         | orslabs.<br>ctural systems<br>ne aim of the |
| Learning outcomes                           | Course outcome   |  | Subject outcome  |                                     | Method of verification |   |         |   |
|   | [K6_U01] is able to use the<br>experience gained during studies<br>to critically analyze the conditions<br>and formulate conclusions for<br>design in an interdisciplinary<br>context  |  | conditions and design context in<br>terms of execution possibilities,<br>can propose appropriate<br>technological and material<br>solutions in consultation with   |                                     |                        | [SU4] Assessment of ability to<br>use methods and tools<br>[SU3] Assessment of ability to<br>use knowledge gained from the<br>subject<br>[SU1] Assessment of task<br>fulfilment |         |   |
|   | [K6_W01] knows and understands<br>construction problems, building<br>and engineering issues related to<br>building design; principles,<br>solutions, constructions and<br>building materials used in simple<br>engineering tasks in the field of<br>architectural and urban design   |  | The student is able to propose<br>and draw on his own, in<br>accordance with the rules of<br>architectural and construction<br>drawing, basic construction<br>solutions for the created projects<br>in the given scope of knowledge. |                                     |                        | [SW3] Assessment of knowledge<br>contained in written work and<br>projects<br>[SW2] Assessment of knowledge<br>contained in presentation  |         |   |
| Subject contents                            | Basic terms used in general construction. Basic types of building structures, division, definitions.<br>Classification of loads acting on structures. Types of building foundation. Building land/soils. Division and<br>classification. Water in soils. Influence of weather, water and ground conditions on the foundation of a<br>building. Marking out building location. Ground works - execution rules. Protection of excavations. Building<br>foundations, rules of execution, division. Direct foundations, detailed description: benches, footings. Direct<br>foundations, foundation grates, slabs, box foundations, foundation blocks. Special foundations on piles.<br>Design of pile grates. Foundations on wells, caissons. Special cases of foundation, foundation next to the<br>neighbor. Construction dilatations. Dredging and strengthening the foundations. Walls types: masonry,<br>wooden, modular structures, basic types and principles of masonry. Chimneys - rules of execution. Building<br>and structural elements shaping the wall surfaces: cornices, pilasters, plinths. |  |  |                                     |                        |   |         |   |

| Prerequisites<br>and co-requisites                             | The student has a basic knowledge of building materials and solutions.  |   |  |  |  |  |
|--|---|---|--|--|--|--|
| Assessment methods<br>and criteria                             | Subject passing criteria  | Passing threshold   | Percentage of the final grade  |  |  |  |
|  | test  | 60.0%   | 50.0%  |  |  |  |
|  | tasks   | 60.0%   | 50.0%  |  |  |  |
| Recommended reading  | Basic literature  | Wymiarowanie konstrukcji murowyc<br>1974 Lewicki Bohdan [i in.], Budynk<br>uprzemysłowionymi. Projektowanie<br>Arkady, 1979 Neufert Ernst, Podręc<br>budowlanego. Warsaw, Arkady, 199<br>ogólne. Warsaw, National Scentific<br>Stanisław, Warunki techniczne wyk<br>montażowych. Warsaw, Arkady, 19<br>Ustroje Budowlane, Publishing Hou<br>Technology, Warsaw, 1991 r. Żeńcz | an, Sikorski Józef, Ktosiński Marian,<br>ch i zespolonych. Warsaw, Arkady,<br>ci wznoszone metodami<br>konstrukcji i obliczenia. Warsaw,<br>cznik projektowania architektoniczno-<br>30 Pawłowski Paweł, Budownictwo<br>Publisher. 1983 Poniatowski<br>onania i odbioru robót budowlano-<br>88 Sieczkowski J., Nejman T.,<br>se of the Warsaw University of<br>zykowski W., Budownictwo Ogólne,<br>szyński K., School and Pedagogical<br>biorowa, Poradnik Majstra |  |  |  |
|  | Supplementary literature  | Professional magazines such as: Murator, Insulation, Building Ma  |  |  |  |  |
|  | eResources addresses  | Adresy na platformie eNauczanie:  |  |  |  |  |
| Example issues/<br>example questions/<br>tasks being completed | To draw a plan view of the building. Construct and draw a cross-section of the building. Designing and drawing a small architecture object in accordance with the rules of technical drawing. |   |  |  |  |  |
| Work placement   | Practice at the construction site.  |   |  |  |  |  |