GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

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| Subject name and code | Diploma project, PG_00055542 | | | | | | |
| Field of study | Architecture | | | | | | |
| Date of commencement of studies | October 2022 | | Academic year of realisation of subject | 2025/2026 | | | |
| Education level | first-cycle studies | | Subject group | Optional subject group<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 | 4 | | Language of instruction | Polish | | | |
| Semester of study | 8 | | ECTS credits | 16.0 | | | |
| Learning profile | general academic profile | | Assessment form | assessment | | | |
| Conducting unit | Department Of Environmental Design -> Faculty Of Architecture -> Wydziały Politechniki Gdańskiej | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | | dr inż. arch. Magdalena Podwojewska | | | | |
| | Teachers | | | | | | |
| Lesson types and methods of instruction | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 0.0 | 0.0 | 0.0 | 120.0 | 0.0 | 120 |
| | 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 | 120 | | 30.0 | | 250.0 | 400 |
| Subject objectives | The aim of the course is to develop a land development project with elements of a technical project on the basis of a project made during classes on the Undergraduate Project in sem. 6. | | | | | | |

| Learning outcomes | Course outcome | Subject outcome | Method of verification |
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| | [K6_W02] knows and understands the rules of gathering information and their interpretation as a part of project concept preparation; issues related to architecture and urban planning in the field of simple design problems solving | knows and understands the rules of gathering information and their interpretation as a part of project concept preparation | [SW3] Assessment of knowledge contained in written work and projects |
| | [K6_K01] is ready to comply with the principles of professional ethics and take responsibility for his/her actions | is ready to comply with the principles of professional ethics and take responsibility for his/her actions | [SK5] Assessment of ability to solve problems that arise in practice |
| | [K6_U01] is able to use the experience gained during studies to critically analyze the conditions and formulate conclusions for design in an interdisciplinary context | is able to use the experience gained during studies to critically analyze the conditions and formulate conclusions for design in an interdisciplinary context | [SU3] Assessment of ability to use knowledge gained from the subject |
| | [K6_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems in a social environment | is able to apply knowledge from the humanities or social sciences or economics or law to solve problems in the social environment | [SU3] Assessment of ability to use knowledge gained from the subject |
| | [K6_K02] is ready to respect the diversity of views and cultures and to show sensitivity to the social aspects of the profession | is ready to respect the diversity of views and cultures and to show sensitivity to the social aspects of the profession | [SK5] Assessment of ability to solve problems that arise in practice |
| | [K6_K71] is conscious of the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment | is aware of the need to use knowledge from the humanities or social or economic or legal sciences in functioning in a social environment | [SK5] Assessment of ability to solve problems that arise in practice |
| | [K6_K04] is ready for lifelong learning, including second cycle and post-graduate studies or participation in other forms of education | is ready for lifelong learning | [SK3] Assessment of ability to organize work |

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| Subject contents | scope: PZT (1:500), 1 projection (1:100), 1 characteristic cross-section (1:100), 1 elevation (1:100) or its parts and an original study of the technical problem related to the prepared project agreed with the supervisor (e.g. selected issues concerning solutions: structural, pro-ecological, material, interior design elements 1 board 100x70cm).The diploma project should be presented on 4 - 6 boards measuring 100x70 cm arranged in a horizontal layout.I. The descriptive part (so-called A4 diploma booklet) should contain:1. Title page (according to editorial guidelines on the WA PG website - engineering diploma st. I).2. Table of contents3. Problem study with description of the concept (Pre-graduate project, semester 6)4. Description of the project (elements)A. land development including:a) indication of: plot numbers covered by the investment, cadastral district, cadastral unit, description of available infrastructure (media),b) tabular indication of the project's compliance with the requirements of the MPZP,c) basic parameters,d) indication of the method of ensuring: access to the building for disabled people, parking spaces for vehicles of other users of the building, bicycle spaces, places for collecting solid waste, access for special vehicles (police, ambulance, emergency medical services, waste disposal plant vehicles, fire brigade vehicles),e) specification of the municipal networks to which the designed building will be connected, indicating from which side of the plot such connections will be made,f) specification of whether the plot will contain technical elements related to the correct functioning of the building (e.g. mechanical ventilation intakes or outlets, solid waste collection point, photovoltaic panels, ground heat pump, rainwater collection point), if so, their location should be indicated.B. description of the elements of the architectural and construction design (PAB) part containing:a) indication and description of the building function, specification of the number of employees in the building and the facilities designed for them (types of rooms, their size and location),b) basic parameters (total area, built-up area, net area, length, width, cubic capacity of the building),c) description of the building's accessibility for disabled people.C. description of the elements of the technical design (PT) containing:a) descriptive selection of installations in the building, specification of the method of routing them in the building and ensuring the required technical rooms for service (names of rooms, sizes and locations),b) description of the structural system indicating the method of foundation of the building, technology of construction of walls and ceilings, specification of dimensions of structural elements, cross-sectional sizes, typical column spacing and maximum ceiling spans,c) description of fire protection issues in the scope of: human hazard category, fire resistance class of the building and requirements for individual elements (R fire load-bearing capacity, E fire integrity, I fire insulation); division of the building into fire zones with a description of their size, required and obtained distances from neighbouring buildings, evacuation conditions indicating the method of evacuation and description of required and maximum obtained lengths of passage and evacuation access; selection of fire installations required for the building.5. Reduced copies of boards (drawing part) in A3 format folded to A4 format with the possibility of attaching them to the paper study + copy of the construction study from semester 6 Pre-graduate project II. Drawing part, consisting of:a) drawings of the architectural concept, developed in the Pre-graduate Project (1:200) in semester 6, containing plans of all storeys (you can omit the plans developed in the technical part), including a roof plan showing the principles of drainage; characteristic cross-sections (you can omit the cross-section developed in the technical part); elevations (you can omit the elevation developed in the technical part); visualizations; diagrams; sketches, etc. The drawings must contain: construction axes, installation shafts, descriptions of rooms, lists of rooms on individual storeys (on boards not in the descriptive part).b) land development plan (1:500) according to detailed guidelines; indication on the drawing of the development area, biologically active area, hardened areas and other urban parameters of the investment; indication of the method of connecting the building to the municipal networks, a legend explaining the markings,c) selected floor plan(s) (1:100) according to detailed guidelines for the selected path agreed with the supervisor,d) description of the architectural partition layers with an indication of the obtained and required heat transfer coefficient U parameter for them, and where necessary, obtaining the appropriate fire resistance class (descriptions on boards not in the descriptive part),e) characteristic cross-section, e.g. through the staircase (1:100) according to detailed guidelinesf) selected building elevation according to detailed guidelinesg) original development of the technical problem related to the developed project (e.g. selected issues concerning structural, pro-ecological, material solutions, interior design elements). |
| Prerequisites and co-requisites | |

Assessment methods and criteria

| Subject passing criteria | Passing threshold | Percentage of the final grade |
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| construction project | 25.0% | 45.0% |
| architectural concept in the field of adaptation to the construction design of installations and technologies, the method of providing the project | 20.0% | 35.0% |
| descriptive part | 10.0% | 20.0% |

Recommended reading

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| Basic literature | • Neufert Ernst, Podręcznik projektowania architektoniczno budowlanego<br>• Budownictwo drewniane. Podręcznik inżyniera, Polskie Wydawnicto Techniczne<br>• Detale projektowe nowoczesnych technologii budowlanych, Archi Plus<br>• Budownictwo ogólne. Podręcznik dla architektów, Archi Plus<br>• ROZPORZĄDZENIEMINISTRA INFRASTRUKTURY 1z dnia 12 kwietnia 2002 r.w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie |
| Supplementary literature | Architectural Material & Detail Structure Concrete, Polskie Wydawnictwo Techniczne<br><br>Architecture: Parking, Gribaudo |

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| | eResources addresses | Adresy na platformie eNauczanie: |
| Example issues/ example questions/ tasks being completed | - constructional solutions- material solutions- construction details- architectural details | |
| Work placement | Not applicable | |

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