



Subject card

Subject name and code	Architectural and Urban Project, PG_00071468						
Field of study	Architecture						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2026/2027		
Education level	second-cycle studies		Subject group		Optional subject group 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	1		ECTS credits		10.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Environmental Design -> Faculty of Architecture -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. arch. Katarzyna Zielonko-Jung				
	Teachers		dr hab. inż. arch. Katarzyna Zielonko-Jung				
			dr inż. arch. Weronika Mazurkiewicz				
			dr hab. inż. arch. Rafał Janowicz				
			dr inż. arch. Barbara Zgórska				
			dr hab. inż. arch. Dorota Kamrowska-Załuska				
			dr hab. inż. arch. Piotr Samól				
			dr inż. arch. Anna Rubczak				
			dr inż. arch. Elżbieta Marczak				
			dr inż. arch. Piotr Marczak				
			dr hab. inż. arch. Karolina Krośnicka				
			dr inż. arch. Agnieszka Błażko				
			dr inż. arch. Adam Bładowski				
			dr inż. arch. Magdalena Rembeza				
			dr inż. arch. Małgorzata Skrzypek-Łachińska				
			dr hab. inż. arch. Agnieszka Gębczyńska-Janowicz				
mgr inż. arch. Jacek Droszcz							
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	135.0	0.0	135
	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	135		20.0		95.0	250

Subject objectives	The aim of the course is to carry out a design process within one of three thematic paths: 1. Environment, 2. Society, 3. Economy. The choice of path is up to the student. The classes serve to understand the essence and complexity of civilizational processes that pose the most important challenges for contemporary architecture and urban planning. The three thematic paths correspond to the basic areas that should undergo controlled transformation in accordance with the idea of sustainable development. The result of the work in class is an urban concept for a selected area requiring transformation and a conceptual design for a selected building located in that area..		
Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W01] knows and understands construction, building and engineering issues related to building design; principles, solutions, constructions and building materials used in performing complex engineering tasks in the field of architectural and urban design	knows and understands the structural, construction and engineering problems related to building design used in performing complex engineering tasks in the field of architectural and urban design	[SW3] Assessment of knowledge contained in written work and projects
	[K7_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems	proposes urban planning and architectural solutions that respond to the social needs of the place, supporting the characteristics of its identity; solutions are in accordance with applicable law and economically justified; is able to work individually and in a team, including with specialists from other industries, and take a leading role in such teams;	[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
	[K7_U03] is able to prepare advanced graphic, written and oral presentation of own design concepts in the field of architecture and urban planning, meeting the requirements of a professional record appropriate for architectural and urban design	prepares and presents the project presentation; undertakes a polemic concerning the proposed design solutions; is able assess the suitability of advanced methods and tools for solving simple and complex engineering tasks typical of architecture, urban planning and spatial planning, and select and apply appropriate methods and tools in design; is able to prepare architectural and construction documentation at appropriate scales in relation to the conceptual architectural design;	[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment
	[K7_K03] is ready to take responsibility for humanities, social, cultural, architectural and urban values in environmental protection and cultural heritage	is ready to take responsibility for shaping the natural environment and cultural landscape; takes into account social, cultural and heritage protection issues in pre-design analyses; includes social, cultural and heritage protection issues in pre-project analyses; is ready for public speaking and presentations; takes into account the principles of universal design, including the idea of designing spaces and buildings accessible to all users, in particular for people with disabilities, in architecture, urban planning and spatial planning, as well as the principles of ergonomics, including the ergonomic parameters necessary to ensure the full functionality of the designed space and facilities for all users, in particular for people with disabilities;	[SK2] Assessment of progress of work [SK1] Assessment of group work skills [SK5] Assessment of ability to solve problems that arise in practice

Subject contents	Course content – project Each of the three paths (1. Environment, 2. Society, 3. Economy) is oriented to a particular problem area to enable students to deepen selected issues. At the same time, within each of the track, the environmental, socio-cultural and technological-economic issues should be addressed at a basic level with the aim of balancing them. Within the Environment track, the issues of urban and architectural design touch on issues such as carbon footprint, circular economy, renewable energy sources, energy efficiency, climate change, blue-green infrastructure, eco-modernization of buildings or settlements. Within the track Society, the issues of urban and architectural design touch on issues such as accessible housing, community, 15minute city, aging society, wellbeing, culture, identity, public spaces, revitalization, conservation of monuments. Within the Economy track, the urban and architectural design problem touches on issues such as: technical infrastructure, industry, logistics, smart city, energy, port, mobility, public transport, security, crisis architecture, healthcare infrastructure. The design task consists of: an in-depth analysis of the conditions and needs of a given place and community, the development of an urban planning concept in the form of a masterplan, and a conceptual architectural design of a selected building. Detailed information is posted each year in the materials for current courses on e-learning.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Urban design	100.0%	50.0%
	Architectural design	100.0%	50.0%

Recommended reading	Basic literature	Track Environment: Dreiseitl H., Grau D., Ludwig K.H.C., Waterscapes. Planning, Building and Designing with Water, Birkhäuser, Basel-Berlin-Boston 2001. Hegger M., Fuchs M., Stark T., Zeumer M., Energy manual, Birkhauser, 2008. Yeang K., Ecodesign, Wiley, 2006. Yeang K., Ecomasterplanning, Wiley, 2009. Track Society: Gehl J., Svarre B., How to Study Public Life: Methods in Urban Design, Island Press, 2013. Moore Ch., Water and Architecture, Thames & Hudson, New York 1994. Sim D., Soft City, Island Press, 2019. Stone S., UnDoing Buildings: Adaptive Reuse and Cultural Memory, Routledge, 2019. Wong L., Adaptive Reuse. Extending the Lives of Buildings, Birkhäuser, 2016. Track Economy: Daniels K., Technology of ecological building, Birkhauser, 1994. Griffin B., Laboratory Design Guide, Taylor&Francis, 2004. Janowicz R., Reducing hospital acquired infections with the use of architectural measures, Gdańsk Tech, 2024. Wiendhal H, Reichardt J., Nyhuis P., Handbook Factory Planning and Design. Springer, 2015.
---------------------	------------------	---

	Supplementary literature	100 Resilient Cities, 2019. Jacobs J., Vital little plans, Random House, 2016. Sadik-Khan J., Solomonow S., Walka o ulice. Jak odzyskać miasto dla ludzi. Wysoki Zamek, 2017. Sensitive approach to water in urban environment, series: Woda w krajobrazie miasta /Water in the Townscape, Januchta-Szostak A. (red.), volume 4, monografia, Wyd. Politechniki Poznańskiej, Poznań 2011. Spoleczne i krajobrazowe walory wody w środowisku miejskim, seria: Woda w krajobrazie miasta /Water in the Townscape, Januchta-Szostak A. (red.), tom 3, monografia, Wyd. Politechniki Poznańskiej, Poznań 2011. Oke T.R., Mills G., Christen A., Voogt J.A., Urban Climates, Cambridge University Press, 2017.
	eResources addresses	
Example issues/ example questions/ tasks being completed	The subject of the project is determined individually each year by the teachers of each group. They usually correspond to the current needs of the city and are accompanied by cooperation with the city government and other institutions. Example topics: 1. Track Environment: self-sustaining settlement, zero-waste urban market, nature observatory, block 2.0 modernization of large-apartment settlements, urban farm. 2. Track Society: social residential district, multi-generational integration facility, adaptation of a post-industrial facility for cultural functions, philharmonic hall, shopping center of tomorrow 3. Track Economy: public transport hub, training center for marine energy experts, port terminal, business incubator, multipurpose facility adapted to emergency situations, factory	
Practical activities within the subject	Not applicable	

Document generated electronically. Does not require a seal or signature.