

Glocal – effective solutions for sustainable city

2025

Symbol	Learning outcomes of hybrid summer course
Knowledge: Student knows and understands	
K_GL_W01	the construction, principles of operation of modern devices used in heating, ventilation and air conditioning systems.
K_GL_W02	influence of climatic conditions on the technical conditions of shaping the architecture of the building and selected aspects of energy-efficient buildings design.
K_GL_W03	standards, rules and guidelines for the design of building structures and their elements
K_GL_W04	modern solutions and construction materials used in energy-efficient buildings
K_GL_W05	contemporary trends in construction technologies and their impact on the architectural form of buildings.
K_GL_W06	influence of heritage value of shaping the architecture of the building
K_GL_W07	influence of greenery ecosystem services in the city, solutions of blue-green infrastructure and types of urban greenery
K_GL_W08	standards, rules and guidelines for the design of accessibility and safety of urban public space
Skills: Student is able to	
K_GL_U01	properly plan research, perform it, interpret its results and draw correct conclusions on this basis
K_GL_U02	use acquired knowledge for critical analysis, synthesis, creative interpretation and presentation of issues in the field of modern architecture inspired by environmental engineering and modern construction in the context of heritage values.
	properly select the technical conditions for designing buildings in relation to climatic conditions in order to design selected building elements of the facility.
K_GL_U03	properly select and use learned methods and tools, including advanced information and communication techniques (ICT) when solving complex problems occurring in engineering and propose their improvement or alternative solutions inspired by vernacular constructions
K_GL_U04	use scientific, popular science and industry literature, subject standards, legal acts, internet databases in English language; properly use the information obtained, as well as formulate and present opinions
K_GL_U05	act in an entrepreneurial way through training and improving professional competences, and initiate activities aimed at using their knowledge and skills
K_GL_U06	be creative and entrepreneurial, cooperate and work in a group, assuming different roles in it
K_GL_U07	establish positive cross-cultural relationships, analyze values, norms and behaviors, and adapt their behavior to the cultural context
Social competence: Student is ready to	
K_GL_K01	analyze the content obtained from various sources, as well as to critically evaluate it and use it in professional work

K_GL_K02	use knowledge to shape the environmental awareness of society, professional and ethical, and take responsibility for their activities
	apply and adhere to the principles of professional ethics and conduct themselves in a professional manner while performing job duties and to enforce such behavior on others.
K_GL_K03	formulate and communicate to the public, in a commonly understood way, information and opinions concerning scientific achievements as well as other aspects of the engineer's activities, presenting different points of view