

Subject description (syllabus)

Faculty of Architecture, WUT 2020, Architecture studies - ASK

NAZWA PRZEDMIOTU Architect in Certified Environment		KOD ASK3-KH-Ce	MSc Level	semester 3
Type of classes: lecture seminar computer exercises design studio	Liczba godz./semestr 10 30	Required student working hours: 30	Status: obligatory Level: basic Subject group: Technical Context – theory / history Language: English	ECTS: 3 Exam: no
Semester	Winter			

ECTS obtained **with personal contact with teacher: 1,7**

Unit delivering this subject: Urban Planning and Land Development Team
Unit of Multi-criteria solutions in Architecture and Urban Planning
Subject coordinator: prof. dr hab. inż. arch. Elżbieta D. Ryńska
co-operation: dr Piotr Bartkiewicz
(Faculty of Building Services, Hydro and Environmental Engineering)

Learning outcomes and subject delivery methods

Objective of the course:

The main aim of the subject is introduction to currently accessible environmental certification used during designing process by the interdisciplinary teams. Content of the lecture should support adequate solution of design issues when faced with it in professional life.

Lectures: a cycle of support knowledge allowing the students to prepare individual solutions imbedded in their semester design studio. Within the technological issues, the scope of lectures should widen student's knowledge and abilities concerning legal, management, ecological and energy efficient solutions.

General description:

Block: Lectures – 10h

Legal issues concerning introduction and application of environmental certification in design and construction process, as well as on the community and in-use level. Design choices versus the outcomes shown on case best examples presenting climate resilient solutions. Lectures will cover following certification standards: BREEAM New Construction International, BREEAM In-use, BREEAM Communities, Home Quality Mark, WELL Certification, LEED for New Construction, LEED for Neighbour Development, Sites, Green Building Standard.

Block: Seminars – 30 h

The aim of this block of seminars is practical application of certification standard in students own design. Students will analyse design from their previous semesters and will provide and collect data sufficient to be used as evidence at chosen certification body. Teachers will indicate which particular credits should be achieved within BREEAM New Construction, WELL, LEED and Green Building Standard certification processes.

Seminars will be aided through by short lectures at the beginning of each certification and will include a wide and multi-criteria approach and connections with particular architectonic decisions.

Learning outcomes:

No. of the outcome/ area	Description
Knowledge	
W01	Has basic knowledge on sustainable development, health and well being issues – contemporary design approaches.
W02	Has basic knowledge about environmental, energy efficient technologies in building disciplines.
W03	Knowledge about legal systems concerning environmental design
Skills	
U01	Ability to recognise basic definitions scoping environmental preservation.
U02	Ability to recognise basic forms of environmental design and their application of sustainable development issues in professional life of an architect and urban planner; ability to use acquired knowledge to achieve harmonic surroundings
U03	Ability to use legal directives and various data sources, as well as ability to understand technology and interdisciplinary conditions.
Social competences	
KS01	Responsiveness to environmental issues, basics of responsible professional approach when dealing with sustainable development issues; knowledge and acceptance of legal conditions
KS02	High ethics standards, high level of personal culture, social responsiveness; has the ability to work in a team; feels the responsibility for planning decisions made and their impact on environment: natural, social and cultural; has acquired the need to include environmental issues during the course of design (society, economy, environment); is creative when undertaking and solving planning tasks

Outcome Number	Way of testing
Knowledge	
W01 - W02	Written presentation - Block 2
Skills	
U01 - U03	Practical implementation of the knowledge acquired during lectures
Social competences	
KS01, KS02	Practical implementation of the knowledge acquired during lectures

Bibliography:

- BREEAM New Construction Manual
- BREEAM In-use Manual
- WELL Manual
- LEED Manual