



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Design without barriers - universal design [S2Bud1E-KB>PbB-PU]

Course

Field of study

Civil Engineering

Year/Semester

2/3

Area of study (specialization)

Structural Engineering

Profile of study

general academic

Level of study

second-cycle

Course offered in

English

Form of study

full-time

Requirements

elective

Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

20

Projects/seminars

0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

Basic knowledge - civil eng.

Course objective

The aim is to make students aware of the diversity of groups / people functioning in society and acquire knowledge and skills in the field of applying the principles of universal design in design activities (e.g. architecture, construction) Acquiring by students the skills of practical application of the principles of universal design and diagnosis of accessibility, both in public space and / or in the design of residential space, taking into account individual or collective needs with special needs, in particular people with disabilities and the elderly

Course-related learning outcomes

Knowledge:

knows the principles of design, The student knows and understands the principles of universal design, The student knows and understands the barriers that are generated by space, objects and their equipment in relation to people with various abilities

know in detail the Act of Building Law, standards and recommendations for building unit design: Polish

standards (PN) and European standards (EN) as well as the technical conditions of constructing selected building units

Skills:

is able to prepare a design of a building object, taking into account the removal of architectural barriers
are able to obtain information from literature, databases and other properly selected information sources; can integrate the obtained information, interpret and evaluate it as well as draw conclusions, formulate, justify, discuss and present opinions
can manage team work, cooperate with other people and take the leading part in teams

Social competences:

The student is sensitive to non-technical aspects and effects of the impact of the built environment on humans of various abilities
is aware of the need for sustainable development in construction and the student is sensitive to problems related to barriers faced by people with disabilities

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Task - grading scale (%) 91-100 very good (A) 81 - 90 good plus (B) 71 - 80 good (C) 61 - 70 sufficient plus (D) 51 - 60 satisfactory (E) less than 50 insufficient (F) Participation in practical classes, final test requirement 50%.

Programme content

Universal Design - Terminology, Solutions, Applications. Design for All, universal design Practical classes with the use of old age

Course topics

Universal design, definition. Legal conditions, including the availability of space and public utility facilities, How to design to non-discriminate - examples and tasks. New technological solutions supporting orientation and movement in space, including personalization of information in the external and internal space, taking into account accessibility for people with special needs Analysis of accessibility and functionality selected for the design of spaces or objects and formulation of modifying recommendations consistent with the principles of universal design. Communication construction and universal design Practical classes with the use of old age simulators.

Teaching methods

Information - in the form of multimedia presentations
Design Thinking - solving tasks in teams
Practical classes with the use of old age simulators.

Bibliography

Basic
Wolfgang F. E. Preiser, Korydon H. Smith UNIVERSAL DESIGN HANDBOOK, ISBN: 978-0-07-162922-5, pdf
William Lidwel, Universal Principles of Design, Rockport Publishers Inc, 2015
Applicable legal regulations, e.g. the United Nations Convention on the Rights of Persons with Disabilities (Journal of Laws of 2012, item 1169)
Additional
Kowalski. K., Włącznik. Projektowanie bez barier. Fundacja Integracja, Warszawa, 2018
Wysocki M.: Tworzenie miasta przyjaznego wszystkim, [w:] Miasto dostępne jako jedno z wyzwań planowania, ed. Krystyna Solarek, Warszawa: 2018, s.37-57
Wysocki M.: Projektowanie uniwersalne w praktyce procesów rewitalizacji, [w:] Urbanistyczne aspekty transformacji miast, ed. Piotr Lorens, Warszawa 2019: s.384-393

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	20	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,00