



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Industrial Design 2 [S2Arch1>WP2]

Course

Field of study
Architecture

Year/Semester
1/2

Area of study (specialization)
–

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other (e.g. online)
0

Tutorials
0

Projects/seminars
60

Number of credit points

4,00

Coordinators

prof. dr hab. inż. arch. Wojciech Bonenberg
wojciech.bonenberg@put.poznan.pl

Lecturers

Prerequisites

- the student has an orderly, theoretically founded general knowledge covering key issues in the field of designing utility objects, - the student has theoretically founded detailed knowledge related to selected issues in the field of industrial design, - the student has detailed knowledge to understand economic, legal, formal, functional and non- technical conditions in the design of industrial design objects, - the student is able to plan and carry out experiments, including measurements and computer simulations, interpret the obtained results and draw conclusions, - the student is able to design a simple device and object using appropriate methods, techniques and tools, - the student is aware of and understands the non-technical aspects and effects of engineering activities, including its impact on the environment and the related responsibility for decisions made, - is able to properly define priorities for the implementation of tasks set by himself or others, - correctly identifies and resolves dilemmas related to the design of objects and utility items,

Course objective

1. Designing your own product and developing the implementation of the project into industrial production. 2. The subject allows to learn about the issues related to the selection of materials and technologies appropriate to the implementation of the designed object of industrial design. 3. The student learns how to develop technical drawings, appropriate diagrams and statements that explain the construction and connection of design elements. 4. Acquainting the student with the methods of preparing a prototype of the designed subject.

Course-related learning outcomes

Knowledge:

A.W5. 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, and ergonomic principles, including ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users, in particular for people with disabilities;

A.W8. the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other fields, as well as its application in the design process in cooperation with specialists in these fields.

Skills:

A.U5. evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks, typical for architecture, urban planning and spatial planning, and select and apply appropriate methods and tools in design;

A.U8. think creatively and act, taking into account the complex and multi-faceted conditions of design activity, as well as expressing own artistic concepts in architectural and urban design;

A.U9. integrate information obtained from various sources, formulate their interpretation and critical, detailed analysis and draw conclusions from them, as well as formulate and justify opinions and demonstrate their relationship with the design process, based on the available scientific achievements in the discipline;

A.U10. communicate with the use of various techniques and tools in a professional and interdisciplinary environment in the scope appropriate for architectural and urban design and spatial planning;

A.U11. work individually and in a team, including with specialists from other industries, and take a leading role in such teams;

A.U13. formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning;

Social competences:

A.S1. effectively use imagination, intuition, creative attitude and independent thinking in order to solve complex design problems;

A.S2. speak and present publicly;

A.S3. take the role of a coordinator of activities in the project process, manage work in a team and use interpersonal skills (resolving conflicts, negotiating skills, delegating tasks), comply with the rules of working in a team and take responsibility for joint tasks and projects;

A.S4. take responsibility for shaping the natural environment and cultural landscape, including the preservation of the heritage of the region, country and Europe.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Assessment criteria and project evaluation method. An important criterion for project evaluation will be the approach to the following issues:

- selection of appropriate methods for the implementation of the prototype,
- a critical analysis of the adopted design solutions,
- appropriate preparation of the technical documentation of the project.

Formative assessment

- Active participation in 2/3 classes.

Summative assessment:

- The work consisting of a poster presenting the final effect of work on a selected project topic and a mock-up is subject to evaluation.

- Final review at the last class - exhibition of designs and voting for the 3 best works, the authors of

which present the adopted design solutions in the forum of the group.

Assessment scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0

Obtaining a positive grade for the module depends on the student achieving all the learning outcomes listed in the syllabus.

Programme content

Development of a prototype along with technical documentation of an item in the field of industrial design;

Refining the project:

- discussing the details of the results of work in semester I, preparing working drawings
- preparation of a working mock-up in an individually selected scale,

Prototype production:

- development of technical drawings,
- selection of materials and technologies appropriate to the subject under development,
- individual work on making a prototype

Course topics

none

Teaching methods

1. Project.
2. eLearning Moodle (a system supporting the teaching process and distance learning).

Bibliography

Basic

Bancroft A. Fashion and Psychoanalysis: Styling the Self. Tauris, New York, 2012.

Bahaskaran L. Design XX wieku. ABE Marketing, Warszawa 2006.

Bonenberg W. Moda. Marka. Architektura. Politechnika Poznańska. Poznań, 2017

Bonenberg W., Wei X. Green BIM in Sustainable Infrastructure. Procedia manufacturing, 2015, Vol.3, pp.1654-1659.

Fiell C., Fiell P. Design Now!. Taschen 2007.

Griffiths, J.S. Savage Beauty: A Futurist Legacy in Fashion and Self-Design. Design and Culture, Volume 12, Issue 2, 3 May 2020, Pp. 185-202.

Liu W., Cui H. Perceptual design method research in product design. E3S Web of Conferences, Volume 179. 2020.

Snack L. Czym jest wzornictwo? Podręcznik projektowania. ABE Marketing, Warszawa 2007. Phidon Design Classics, 2006.

E-skrypt dla przedmiotu "Wzornictwo przemysłowe 2"(in development).

Additional

1. kwartalnik, 2+3D
2. kwartalnik, Design Alive
3. miesięcznik, ELLE Decoration

Breakdown of average student's workload

	Hours	ECTS
Total workload	120	4,00
Classes requiring direct contact with the teacher	60	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	60	2,00