



- familiarize student with methods of preparation of prototype the designed object.		
<b>Learning outcomes</b>		
<b>Knowledge:</b>		
number (symbol)	Having completed the course, student can:	Reference to the outcomes of the learning process in the area of technical sciences
W01	has knowledge of development trends and most important achievements in design, architectural designing and urban planning, design the modernization of historical buildings as well as of arts – drawing, painting and sculpture,	AU2_W02
W02	has explicit, well-grounded theoretical knowledge on designing service facilities, health care centers, offices and other work places as well as bionics, design and revitalization of urban space and facilities,	AU2_W05
W03	knows basic methods, techniques, tools and materials applied in the solutions of complex engineering tasks in the scope of designing service facilities, offices and other work places as well as bionics and design,	AU2_W09
<b>Skills:</b>		
number (symbol)	Having completed the course, student can:	Reference to the outcomes of the learning process in the area of technical sciences
U01	can acquire information from field specific literature, data bases and other properly selected sources in Polish and English, can integrate the acquired information, interpret and critically assess the said information, as well as draw conclusions and come up with opinions supported with satisfactory reasons,	AU2_U01
U02	can plan respective stages of the designing process, can carry out analytical study of spatial resources and the best design solutions, as well as can interpret the analytic data and verify the adopted assumptions,	AU2_U04
U03	can assess the usefulness of the new achievements and apply them in the field of architecture and town planning as well as other related fields,	AU2_U06
U04	can come up with improvements regarding the existing architectural, urban and regional spatial solutions,	AU2_U09
<b>Social competences:</b>		
number (symbol)	Having completed the course, student can:	Reference to the outcomes of the learning process in the area of technical sciences
K01	at the execution of an engineering task/organisational task, he/she can think reasonably and act in a creative, entrepreneurial way,	AU2_K02
K02	observes the principles of professional ethics; is responsible for the reliability of the obtained results of his/her work and their interpretation,	AU2_K03

K03	is aware of the importance of non-technical aspects and effects of engineering activities, in this impact upon the environment and liability for environment affecting decisions.	AU2_K05
<b>Methods of check the learning outcomes</b>		
<p><b>Credit conditions and method of project assessment. An important criterion of project assessment is approach to the following issues:</b></p> <p>a) selection of appropriate methods of prototype implementation,  b) critical analysis of adopted design solutions,  c) proper preparation of technical documentation of project,</p>		
<p><b>Summary score:</b></p> <ul style="list-style-type: none"> <li>▪ There are assessed work consisting of poster presenting the final effect of work on the selected design topic and mock-up,</li> <li>▪ Final review at the last classes – projects exhibition and voting for the 3 best works, which authors present the adopted design solutions in the forum of group.</li> </ul> <p>Final grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0</p>		
<b>Course contents</b>		
<p>Development of prototype with technical documentation of object from the field of industrial design.</p> <p>Refinement of project:  - discussion of details of work results from the first semester, preparation of working drawings,  - preparation of working mock-up in individually selected scale,</p> <p>Prototype production:  - development of technical drawings,  - selection of materials and technologies appropriate to developed object,  - individual work on implementation of prototype.</p>		
<p><b>Basic bibliography:</b></p> <ol style="list-style-type: none"> <li>1. Snack L. Czym jest wzornictwo? Podręcznik projektowania. ABE Marketing, Warszawa 2007</li> <li>2. Phidon Design Classics, 2006</li> <li>3. Bahaskaran L. Design XX wieku. ABE Marketing, Warszawa 2006</li> <li>4. Fiell C., Fiell P. Design XX wieku. Taschen 2002,</li> <li>5. Fiell C., Fiell P. Design Now!. Taschen 2007,</li> <li>6. Athavankar U. The Semantic Profile of Products, In Semantic Vision in Design, Ed. Vihima Susan, University of Industrial Art, UIAH, Helsinki, 1990, pp D1 - 31,</li> </ol>		
<p><b>Complementary bibliography:</b></p> <ol style="list-style-type: none"> <li>1. kwartalnik, 2+3D</li> <li>2. kwartalnik, Design Alive</li> <li>3. miesięcznik, ELLE Decoration</li> </ol>		
<b>The workload of student</b>		
<b>Form of activity</b>	<b>Hours</b>	<b>ECTS</b>
Total workload	122	5
Activities that require individual contact with the teacher	63	2,5
Activities of practical	59	2,5

### Balance the workload of the average student

Form of activity	Number of hours
participation in lectures	0 h
participation in classes/ laboratory classes (projects)	60 h
preparation for classes/ laboratory classes	13 x 3 h = 39 h
preparation to colloquium/final review	20 h
participation in consultation related to realization of learning process	3 x 1 h = 3 h
preparation to the exam	0 h
attendance at exam	0 h

Total workload of student:

**5 ECTS credits**

**122 h**

As part of this specified student workload:

- activities that require direct participation of teachers:

60 h + 3 h = **63 h**

**2,52 ≈ 2,5 ECTS credits**