

### POZNAN UNIVERSITY OF TECHNOLOGY

**EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)** 

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Diploma seminar [S1Arch1>SD]

Course

Field of study Year/Semester

Architecture 4/8

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other

0 0

Tutorials Projects/seminars

30 0

Number of credit points

5,00

Coordinators Lecturers

### **Prerequisites**

- student has explicit, theoretically based knowledge including the key issues of designing architectural and urban planning composition, - student has knowledge of development trends in designing architectural and urban planning form, - student knows the basic methods used at solving design tasks in the scope of designing architectural and urban form, - student has knowledge required for the understanding of social determinants of activity related to correct formation of space, - student can acquire information from publications, data bases and other sources in Polish and other foreign language considered as a language of international communication in his/her field of study, can interpret and integrate the said information and draw conclusions as well as voice and justify opinions, - student can prepare in Polish (and foreign language), which is considered as a basic for the field of science and scientific disciplines relevant to his/ her field of study, well-documented elaboration concern issues related to main trends and directions of architecture and urban planning, - student has self-education skills, - student can carry out critical analysis and assess the importance of design solutions in the scope of architectural and urban planning composition, - student can use IT techniques, including artistic means, respectively to the performance of tasks typical for designing the architectural composition, - student is aware of the importance of nontechnical aspects and effects of architectural activities, in this impact upon the environment and spatial context and liability for environment affecting decisions related to correct formation of space, - student correctly identifies dilemmas related to profession of architect and town planner, - student is aware of social role of technical studies graduate, especially understands the needs of formulation and communication to the public, especially by mass media, information and opinions related to the achievements of technique

and other aspects of engineering activity; makes efforts to provide such information and opinion in commonly understood manner, - student can work and cooperate in a team, assuming a number of different roles therein.

# Course objective

- theoretical preparation of student to development of engineering diploma project, consisting in development of individual topics, discussing in diploma project - presentation of development methodology of engineering diploma project with descriptive part, determination of work plan - discussion of issues of work originality and consequences of proving plagiarism - searching the source materials - implementation of theoretical chapters of work: support and development of the analytic part of engineering diploma thesis. Discussion of importance and preparation of analyses - discussion of conclusions from carried out analysis and determine their impact on selection of design solutions - determine the complementary literature related to design issues - implementation of design part according to guidelines ("Diploma thesis. Methodological guide for students preparing engineering or master diploma thesis") - presentation of assumptions and results of engineering diploma thesis; preparation, uttering and preliminary assessment of final presentation of diploma thesis

## Course-related learning outcomes

#### Knowledge:

Student knows and understands:

E.W1. issues related to architecture and urban planning in the field of solving design problems;

E.W2. issues related to architecture and urban planning useful for designing architectural objects and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activity, integrating the knowledge acquired during studies;

E.W3. principles, solutions, structures, building materials used in the performance of engineering tasks in the field of architectural and urban design;

E.W4. issues related to architecture and urban planning in the context of the multi-sector nature of architectural and urban design and the need to cooperate with other specialists;

E.W5. principles of professional presentation of architectural and urban concepts.

#### Skills:

Student can:

E.U1. analyze the existing conditions, evaluate the state of land development and buildings, and formulate design conclusions;

E.U2. design an architectural object or an urban complex by creating and transforming the space so as to give it new values - in accordance with the adopted program, taking into account non-technical aspects and integrating interdisciplinary knowledge and skills acquired during the studies;

E.U3. prepare an advanced graphic, written and oral presentation of your own design concepts in the field of architecture and urban planning, meeting the requirements of a professional record appropriate for architectural and urban design.

### Social competences:

Student is capable of:

E.S1. effectively use imagination, intuition, creative attitude and independent thinking as well as creative work in order to solve design problems;

E.S2. accept criticism of solutions presented by them and respond to it in a clear and matter-of-fact manner; E.S3. use information technology to integrate with other participants in processes and projects, including presenting projects and providing feedback in a commonly understood manner.

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

A basic credit condition and assessment criterion are:

- the degree of topics originality in diploma project,
- the quality of development of work's theoretical chapters, among other things analytic part: compositional, functional, communicational analysis, greenery analysis, view analysis, analysis of insolation conditions, historical analysis in relation to location of diploma project
- accuracy of drawn conclusions from carried out analysis and their transformation on design solutions

- implementation quality of design part: optionality of presented design propositions, creative use the innovative structural systems and building materials
- assessment of presentation of engineering diploma thesis prepared by student.

Summative assessment: final grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0.

Positive grade for module depends on achieved by student all learning outcomes specified in the syllabus.

### Programme content

The student chooses the subject of the diploma and the diploma unit

Presentation of assumptions and results of engineering diploma thesis; preparation, uttering and preliminary assessment of final presentation of diploma thesis

Descriptive part, development of 40 – 60 pages of A4 text, containing:

- admittance (with introduction and substantiation of topic selection)
- main descriptive part of work consisting of technical description
- the end, including summary of whole work and resulting conclusions
- literature, the list of used written sources
- the list of illustrations with their sources
- boards, being decreasing of graphic part to A4 format
- photos of model, minimum 2 pieces (maximum 4 pieces), in A4 format
- annexes

Design part, development of 4 drawing boards, 100 x 70 format, containing:

- project of Master Plan with readable list of conventional sign and balance of surface
- views of aboveground and underground storeys with list of premises
- minimum two sections
- facades
- two perspectives showing spatially buildings or complex of buildings
- fragments of view and section dimensioned and described in detail (on scale 1:50)
- architectural detail (on the scale 1:20, 1:10, 1:5) Student has to develop physical model of building on the scale agreed with the teacher

### **Course topics**

- theoretical preparation of student to development of engineering diploma project, consisting in development of individual topics, discussing in diploma project
- presentation of development methodology of engineering diploma project with descriptive part, determination of work plan
- discussion of issues of work originality and consequences of proving plagiarism
- searching the source materials
- implementation of theoretical chapters of work: support and development of the analytic part of engineering diploma thesis. Discussion of importance and preparation of analyses
- discussion of conclusions from carried out analysis and determine their impact on selection of design solutions
- determine the complementary literature related to design issues
- implementation of design part according to guidelines ("Diploma thesis. Methodological guide for students preparing engineering or master diploma thesis")
- presentation of assumptions and results of engineering diploma thesis; preparation, uttering and preliminary assessment of final presentation of diploma thesis

# Teaching methods

- 1. Problem seminar, discussions and presentations.
- 2. eLearning Moodle (a system supporting the teaching process and distance learning).

# **Bibliography**

### Basic

- 1. Watkin D., Historia architektury zachodniej, Warszawa 2001
- 2. Czarnecki W. Planowanie miast o osiedli. PWN. Warszawa. 1965.
- 3. Neufert E., Podręcznik projektowania architektoniczno-budowlanego, Arkady, W-wa 1991
- 4. Ustawa z dnia 27 marca 2003 r. o planowaniu i zagospodarowaniu przestrzennym, Dz. U. Nr 80, poz.

### 717. Warszawa. 6

- 5. Ustawa z 12 kwietnia 2002 Dz.U. Nr 75, 2002, Rozporządzenie Min. Infr. w sprawie warunków technicznych jakim powinny odpowiadać budynki i ich usytuowanie
- 6. Ustawa z dnia 7 lipca 1994 r. Prawo budowlane tekst ujednolicony z poprawkami
- 7. Marciniak P., Przewodnik metodyczny dla osób przygotowujących pracę dyplomową inżynierską lub magisterską, Poznań 2016,

http://architektura.put.poznan.pl/n/wpcontent/uploads/2016/05/PRZEWODNIK\_WAPP\_PRACE DYPLOMOWE\_v8\_30112016.pdf.

### Additional

Supplementary literature selected individually depending on the subject of the diploma project

## Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,00
Classes requiring direct contact with the teacher	30	1,50
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	95	3,50