

W02	student knows the basic methods, techniques, tools and materials used at solving engineering tasks of designing and tasks of technical infrastructure of the town	AU1_W18
Skills:		
U01	student can acquire information from field specific literature, data bases and other properly selected Polish and English sources, can integrate the acquired information, interpret as well as draw conclusions and come up with opinions supported with satisfactory reasons	AU1_U01
U02	student can, thanks to understanding the relationships between the object the surroundings, identify the existing functional and spatial resources, can evaluate these resources and come up with respective conclusions on possible transformations in town planning; can prepare the land development plan for terrain characterized with increasing degree of complexity	AU1_U21
U03	student can, when formulating engineering tasks and solving them, notice their social, historical, natural, economic and legal aspects and well as aspects related to landscape	AU1_U25
Social competences:		
K01	student can work over a set task independently and can cooperate in a team, assuming a number of different roles therein; demonstrates responsibility in the work performance	AU1_K01
K02	student is aware of the importance of non-technical aspects and effects of design activities of architect, in this impact upon the environment and liability for environment affecting decisions,	AU1_K05
The evaluation methods:		
<p>Lecture: Credit conditions. - attendance at lectures - credit on the rights of exam Classes: Formative assessment: review of works progress and/or defense in the forum of group. Partial reviews checking the progress of student work – positive assessments from reviews are necessary to credit the course. Review 1. Closing the stage of analyses. Report about place in the form of book and all analyses, which development was planned at classes 1-3, on scales corresponding to the topic. Review 2. Closing the stage of summary of analyses and valorization. Review of works progress and/or defense in groups. Described above analyses which valorize studied area, presented in the drawing and descriptive form (description on the board). Review 3. Review of works progress and/or defense in the groups. Design conception of center on the scale 1:1000 or 1:2000 presented in the drawing and text form (description on the board). Final grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0 Summative assessment: final review at the last classes – projects exhibition and presentation of design solutions in the forum of group. The form of project: boards A3,A2, B2 and CD with the record of project (jpg format). To get positive grade from course, student should meet the following conditions:</p> <ul style="list-style-type: none"> - design work has to be implemented according to above mentioned scope of development, - the number of absences may not exceed 30 % per semester, - must be obtained the positive assessments from all 3 reviews, - design work must be developed graphically in readable, aesthetic and innovative manner, - final assessment is a sum of grades from reviews, substantive and graphic value of project and activity during classes. <p>Final grading scale: 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.</p>		
Course contents		
<p>Lecture:</p> <ol style="list-style-type: none"> 1. Introduction to the issues related to formation of urban structure in the layout of whole city as well its individual elements. Elements of urban structure by K. Lynch. 2. City forming factors as a constructive element of complex layouts of urban structures. 3. Theories of cities formation. History of development and the idea of cities formation. 4. Planning the cities and housing estates by Władysław Czarnecki. 5. Central areas of urban structures as an effect and method of cities formation till the end of 18th century. 		

- Palinosemiotic and additive structure.
6. Spatial development of Poznan as an example of 19th and 20th century tendencies in the method of creation of urban tissue. Identity of urban structure.
 7. Greenery in structure of cities as well their housing estates.
 8. Structures of building development and its individual functions.
 9. Communication in urban structures and in the housing estates (parameters, types).
 10. Formation of housing estates. Selected issues.
 11. Contemporary directions and development ideas of cities and housing estates.

Classes:

Study part A

STAGE A1. Description – report of place

Collection of starting materials, preliminary analyses.

Report of place contains:

Text part in the A4 format

- typical elements of place
- history of place
- description of the current situation

drawing part in the A4 format

- connections with the urban or regional context
- photographic and drawing documentation

the form of project:

report developed in the form of A4 book

STAGE A2. Analytical studies of selected area and its connections with environment on the city scale or commune scale.

Analytical studies related to:

- location and connections of place with the city in the functional, compositional and communication scope on the scale 1:10 000, 1:5000.
- urban context and natural conditions, including: configuration of terrain, growth of vegetation, occurrence of waters etc.
- current building development (functions) and investment (investments) of studied area and its environment

STAGE A3.

Detailed analyses of selected area of the city.

Analyses of selected area on the scale 1:1000 or 1:2000, including:

- connections and communication availability
- functional inventory with indication of main functions and more important architectural facilities
- cultural values – monuments
- natural values – greenery with different functions

compositional and landscape values of place with environment: points, axes and scenic lines, dominants, accents, specific characters - positive and negative

- crystallization and integration of area with main public spaces (squares, streets) of city

Study part B

STAGE B. valorization of selected strategic area – assessment of existing resources, formulation of conclusions and determine the main design assumptions.

Valorization of selected strategic area:

- analysis and economic evaluation using SWOT method as a set of design guidelines determining what to keep, what to transform, what to develop
- zoning evaluative (high, medium and low values) from the point of view of natural, cultural, compositional and functional values on the scale 1:1000 or 1:2000.

Zonal division of area according to values determines the scale of permitted transformation distinguishing the values:

- high – to keep
- medium – to transform
- low – to elicitation and revitalization.

Design part C

Work on the design conception of urban and architectural complex on the analyzed area, building the functional and spatial program of complex of center.

Determination of general goals of project:

- improvement of spatial order
- improvement of living quality of residents thanks to creation of new, attractive spatial form with multifunctional nature, which will help to meet the diverse needs of users and residents of the city.

Determination of dominant function of center (trade, business, services, culture, education, recreation, sport etc.) and complementary functions (e.g. gastronomy).

STAGE C1. Formulation of conclusions and design guidelines in text and drawing form – diagrams, schemas, sketches.

STAGE C2.

Creation of program of transformations or renovation of studied area, taking into account the existing determinants

and functional and spatial connections with environment. Designing and creating conception on the basis of principle of sustainable development, which takes into account the: spatial, social and economic aspects.

Basic board:

- location conception of center function on the scale 1:1000 or 1:2000
- proportional balance of surface the designed function
- relations between built spaces and un-built spaces – schwarzplan
- building development project of center area: architectural facilities, spaces of squares and streets, green areas
- axonometric view of whole center structure
- perspective views of specific place of center from the position of man (entry, climax, output) in respect to “architectural road” of man, moving around the center.

Design part D

STAGE D. Urban project of realization on the scale 1:500 the selected fragment of developed center.

Urban project of realization on the scale 1:500 the selected fragment of developed center with marking:

- contour of capacity facilities surrounding main square
- full walls and glazed facilities
- inputs and outputs pointers in facilities
- determination of surface type, including square surface and its height
- types of illumination (standing, hanging lantern, spotlights, floor spotlight)
- dewatering system – catch basin grates and directions of water runoff
- types of greenery (trees, shrubbery, grass, flowers)
- urban detail and elements of small architecture (benches, waste-paper baskets, pergolas, fountains)
- presentation of conception in the third dimension in the form of: model, axonometry, visualization
- presentation of manual design sketches with written commentary, documenting the development of conception.

Basic bibliography:

- Czarnecki W., *Planowanie miast i osiedli*, Poznań 1960-1965
Instrumentalizacja polityki przestrzennego zagospodarowania kraj, red. Markowski T., Warszawa 2001
 Jaśkiewicz J., *Zasada kompensacji przestrzeni w zamkniętych wnętrzach urbanistycznych*, Warszawa 1966
 Juchnowicz S., *Śródmieścia miast polskich. Studia nad kształtowaniem i rozwojem centrów*, Warszawa-Kraków-Gdańsk 1971
 Krier R., *Town spaces*, Switzerland 2003
 Krier L. *Architektura wybór czy przeznaczenie* Warszawa 2001
 Lynch K., *Obraz miasta* Kraków 2011
 Ostrowski W., *Urbanistyka współczesna*, Warszawa 1980
 Ostrowski W., *Zespoły zabytkowe a urbanistyka*, Warszawa 1980
 Panerai P., Castex J., Depaule J.Ch., Samuels I., *Urban forms. The death and life of the urban block*, Great Britain 2004
 Ast R. *Kształtowanie przestrzeni regionów i miast*, Poznań 2001
 Gehl J. *Życie między budynkami* Kraków 2009
 J. M. Minguet *Sustainable urban landscape* Monsa 2008

Supplementary bibliography:

- Ast R., *Architektura wybrzeża*, Wyd. PP., Poznań 1999
 Hall E., *Ukryty wymiar*, Warszawa 1978
 Hall E., *Bezgroźny język*, Warszawa 1987
 Jałowiecki B., *Spoleczne wytwarzanie przestrzeni*, Warszawa 1980
 Palej A., *Miasta cywilizacji informacyjnej*, Kraków 2003
 Wallis A., *Socjologia przestrzeni*, Warszawa 1990
 Wejchert K., *Elementy kompozycji urbanistycznej*, Warszawa 1974
 Wejchert K., *Przestrzeń wokół nas*, Katowice 1993
 Zuziak Z., *Strategie rewitalizacji przestrzeni śródmiejskiej*, Kraków 1998
 Żórawski J., *O budowie formy architektonicznej*, Warszawa 1973

The student workload

Form of activity	Hours	ECTS
Overall expenditure	158	6
Classes requiring an individual contact with teacher	83	3
Practical classes	75	3

Balance the workload of the average student

Form of activity	Number of hours
participation in lectures	30 h
participation in classes/ laboratory classes (projects)	45 h
preparation for classes/ laboratory classes	15 x 3 h = 45 h
preparation to colloquium/review	20 h
participation in consultation related to realization of learning process	3 x 2 h = 6 h
preparation to the exam	10 h
attendance at exam	2 h

Overall expenditure of student:

158 h

As part of this specified student workload:

- activities that require direct participation of teachers:

$30\text{ h} + 45\text{ h} + 6\text{ h} + 2\text{ h} = 83\text{ h}$

3 ECTS credits