# Faculty of Civil and Environmental Engineering

STUDY MODULE DESCRIPTION FORM					
Name of the module/subject Town and Space Planning		Code 1010101261010130956			
Field of study	Profile of study (general academic, practical)	Year /Semester			
Environmental Engineering First-cycle Studies	general academic	3/6			
Elective path/specialty	Subject offered in:	Course (compulsory, elective)			
-	Polish	obligatory			
Cycle of study:	Form of study (full-time,part-time)				
First-cycle studies		full-time			
No. of hours		No. of credits			
Lecture: 15 Classes: 15 Laboratory: -	Project/seminars:	- 2			
Status of the course in the study program (Basic, major, other) (university-wide, from another field)					
other university-		rsity-wide			
Education areas and fields of science and art		ECTS distribution (number and %)			
technical sciences		2 100%			
Technical sciences		2 100%			

### Responsible for subject / lecturer:

dr hab. inż. Zbigniew Bromberek, prof. nadzw. email: zbigniew.bromberek@put.poznan.pl tel. +48 61 647 5827, +48 61 665 2438 Wydział Budownictwa i Inżynierii Środowiska ul. Piotrowo 5 60-965 Poznań

### Prerequisites in terms of knowledge, skills and social competencies:

1	Knowledge	Basic knowledge of water supply, sewerage and remote heating systems design
2	Skills	Appreciation of external conditions and ability to analyse engineering problems in their socio-economic, geopolitical and historical contexts
3	Social competencies	Awareness of the need for life-long learning to update and broaden one?s knowledge and skills; ability to work in teams

### Assumptions and objectives of the course:

Transfer of basic information in the area of urban design and spatial planning as a background knowledge for engineer?s profession in building, as well as typical tasks/problems faced by environmental engineers and related to objectives? formulation and needs? forecasting

#### Study outcomes and reference to the educational results for a field of study

# Knowledge:

- 1. Student knows principal and basic rules of urban design and spatial planning as well as used/available means [K\_W05, K\_W07, K\_W08]
- 2. Student knows and understands the role of basic legal determinants and the function of particular planning instruments [K\_W05, K\_W08, K\_W11]
- 3. Student knows and understands principles of urban/regional infrastructure development in a context of organisational, technical and economic limitations [K\_W05, K\_W08, K\_W09, K\_W11]

#### Skills

- 1. Student can set tasks and work out objectives of spatial planning for technical infrastructure development [K\_U01, K\_U03, K\_U04, K\_U10, K\_U15]
- 2. Student can describe legacy conditions, barriers and limiting factors as well as work out development perspectives of selected infrastructural systems [K\_U01, K\_U03, K\_U04, K\_U10, K\_U14, K\_U15]
- 3. Student can analyse planning documentation, also from the investor?s needs and abilities point of view  $[K\_U01, K\_U03, K\_U04, K\_U10, K\_U14, K\_U15]$

# Social competencies:

- 1. Student understands the need for team effort in solving practical and theoretical engineering problems  $-[K_K01, K_K03, K_K04, K_K07]$
- 2. Student can see the need of continuous broadening and enhancement of their competencies [K\_K01, K\_K04, K\_K07]

### Assessment methods of study outcomes

1. Subject?s logbook containing brief description of all class activities -- prepared individually, but attached to a team?s report [40% SQN]

?date and title of the lecture with a summary of its contents

?date and title of the tutorial with a brief report of activities and one?s own conclusions

?brief answer to the question: ?How the topic of a lecture/tutorial contributed to the tasks/objectives of spatial planning??

2. Team report containing a concise analysis of a selected aspect of the spatial plan based on a selected county of the Wielkopolska region [60%] prepared in a 3-4 person team

?presentation of the selected infrastructural system (aspect of the plan), legacy problems, development barriers and perspectives as well as foreseeable, broadly defined, costs of the development

3. Continuous monitoring of student cooperation and their pro-active stance in gaining skills and knowledge

## **Course description**

?Basic terminology (urban design, town planning, spatial development, technical infrastructure, ?, spatial planning)

?Urban design as a response to (broadly defined) environmental challenges

?Urbanisation and accompanying environmental phenomena

?Planning objectives, planning system, planning instruments other than (graphic) plans

?Legal basis of spatial planning and space management (spatial development)

?Studies and analyses in planning processes

?Principles of dimensioning open spaces in urban areas (parameters, standards urban determinants)

?Technical infrastructure in spatial development plans

?Principles of infrastructure positioning in urban spaces

#### Basic bibliography:

- 1. Chmielewski JM Teoria urbanistyki w projektowaniu i planowaniu miast Wyd. Politechniki Warszawskiej, W-wa 2001
- 2. Czarnecki W Planowanie miast i osiedli t.I-VI, PWN, W-wa 1965
- 3. Regulski J Planowanie miast PWE, W-wa 1986
- 4. Wróbel T Zarys historii budowy miast Ossolineum, Wrocław 1971

## Additional bibliography:

- 1. Domański T Strategiczne planowanie rozwoju gospodarczego gminy Arkady, W-wa 2000
- 2. Kopietz-Unger J Urbanistyka w systemie planowania przestrzennego Wyd. Politechniki Poznańskiej, P-ń, 2000
- 3. Longley P GIS Teoria i praktyka PWN, W-wa, 2006
- 4. Maik W Podstawy geografii miast Wyd. UMK, Toruń 1992
- 5. Rutkowski S Planowanie przestrzenne obszarów wypoczynkowych w strefie dużych miast PWN, W-wa 1975
- 6. Styrna-Bartkowiczowa K i Szafer TP Ekologia środowiska mieszkaniowego Ossolineum, K-ów 1977
- 7. Szczygielski K Zarządzanie przestrzenią Wyd. WSZiA, Opole 2003
- 8. Beer A Environmental planning for site development E&FN Spon, London 1996
- 9. Hawkes D The environmental tradition E&FN Spon, London 1996
- 10. Lang J Urban design: a typology of procedures and products Architectural Press, Oxford 2005
- 11. Marcus CC, Sarkissian W Housing as if people mattered University of California Press, Berkeley 1986

#### Result of average student's workload

Activity	Time (working hours)
Participation in lectures	15
2. Participation in tutorials	15
3. Preparing for tutorials	15
4. Preparing the log book and final report	25

#### Student's workload

Source of workload	hours	ECTS		
Total workload	70	2		
Contact hours	30	1		
Practical activities	30	1		