

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Fundamentals of Architecture and Civil Engineering		Code 1010101221010137719
Field of study Environmental Engineering First-cycle Studies	Profile of study (general academic, practical) (brak)	Year /Semester 1 / 2
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 30 Classes: - Laboratory: - Project/seminars: -		No. of credits 2
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 2 100% 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	No prerequisites
2	Skills	Ability to see the context and analyse the engineering problem in its socio-economic, geopolitical and historical environments
3	Social competencies	Awareness of the need for life-long learning to keep the knowledge and skills up-to-date
Assumptions and objectives of the course: Transfer of basic knowledge in the area of architecture and urban design as a context for engineer's profession, as well as typical tasks/problems appearing in the engineering of the built and natural environments		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Student knows the principal objectives of architecture and urban design together with the means used to achieve them - [K_W02, K_W05, K_W08]		
2. Student knows and understands the role of structural solutions, building systems and materials, formal and functional designs in the history of building and architecture - [K_W02, K_W05, K_W07, K_W09]		
3. Student knows and understands relationships between architecture and urban design, and their interactions with organisational, technical and economic possibilities - [K_W02, K_W08, K_W09]		
Skills:		
1. Student can collect necessary information to recognise basic styles characterising buildings in a given historical period - [K_U01, K_U05, K_U13]		
2. Student can identify most important achievements in history of architecture and urban design - [K_U01, K_U05]		
3. Student can analyse architecture and urban design as symptoms of needs and investor - [K_U01, K_U10]		
Social competencies:		
1. Student understands the need for continuous updating his/her knowledge required in solving theoretical and practical problems, and putting it in its contexts - [K_K01, K_K02]		
2. Students can see the need for continuing to increase the depth and breadth of their knowledge - [K_K01, K_K02, K_K05, K_K07]		

Assessment methods of study outcomes		
Final test: pisemny (approx. 40 questions), multiple choice, approx. 30 minutes (W02, W05, W07, W08, W09, U01, U05, U10, U13)		
Continuous assessment of progress made by students, their lecture activity in gaining knowledge/skills (K01, K02, K05, K07)		
Course description		
<p>-Basic terminology (urban design, spatial planning, spatial economics, technical infrastructure, ? , architecture and its components: form, structure and function, architectural styles)</p> <p>-Architecture and urban design as a response to environmental challenges</p> <p>-Urbanisation and accompanying environmental phenomena</p> <p>-Objectives and legal basis for spatial planning and economics</p> <p>-Studies and analyses in spatial planning</p> <p>-Principles of allocating functions in urban areas (parameters, standards urban standards)</p> <p>-Technical infrastructure in spatial planning</p> <p>-Principles of spatial situating of infrastructure</p> <p>-Objectives and means of architectural design</p> <p>-History of architecture vs. technological developments</p>		
Basic bibliography:		
<ol style="list-style-type: none"> 1. Broniewski T Historia architektury dla wszystkich wyd. II, Ossolineum, Wrocław 1980 2. Chmielewski JM Teoria urbanistyki w projektowaniu i planowaniu miast Wyd. Politechniki Warszawskiej, W-wa 2001 3. Czarnecki W Planowanie miast i osiedli t.I-VI, PWN, W-wa 1965 4. Dobrowolski T Sztuka polska Wyd. Literackie, Kraków 1974 5. Koch W Style w architekturze Świat Książki, W-wa 1996 6. Watkin D Historia architektury zachodniej Arkady, W-wa 2006 7. Wróbel T Zarys historii budowy miast Ossolineum, Wrocław 1971 		
Additional bibliography:		
<ol style="list-style-type: none"> 1. Biegański P U źródeł architektury współczesnej PWN, W-wa 1972 2. Charytonow E Zarys historii architektury wyd. VII, WSiP, W-wa 1978 3. D?Alfonso E i Samss D Historia architektury Arkady, W-wa 1997 4. Dobrowolski T Sztuka polska Wyd. Literackie, Kraków 1974 5. Domański T Strategiczne planowanie rozwoju gospodarczego gminy Arkady, W-wa 2000 6. Estreicher K Historia sztuki w zarysie wyd. VII PWN, W-wa 1986 7. Karpowicz M Barok w Polsce Arkady, W-wa 1988 8. Latour S i Szyski A Rozwój współczesnej myśli architektonicznej PWN, W-wa 1985 9. Llera RR Historia architektury Buchmann, Hamburg 2008 10. Lorentz S i Rottermund, A Klasycyzm w Polsce Arkady, W-wa 1984 11. Maik W Podstawy geografii miast Wyd. UMK, Toruń 1992 12. Regulski J Planowanie miast PWE, W-wa 1986 13. Rutkowski S Planowanie przestrzenne obszarów wypoczynkowych w strefie dużych miast PWN, W-wa 1975 14. Styrna-Bartkowiczowa K i Szafer TP Ekologia środowiska mieszkaniowego Ossolineum, K-ów 1977 15. Szczygielski K Zarządzanie przestrzenią Wyd. WSZiA, Opole 2003 16. Świechowski Z Sztuka romańska w Polsce Arkady, W-wa 1982 17. Fletcher, B A history of architecture 20th ed. Architectural Press, Oxford 1996 18. Kostof, S A history of architecture 2nd ed. Oxford University Press 1995 		
Result of average student's workload		
Activity	Time (working hours)	
1. Participating in lectures	30	
2. Studying the source materials (literature, internet etc.)	10	
3. Preparation for the final test	10	
Student's workload		
Source of workload	hours	ECTS
Total workload	50	2

Contact hours	30	1
Practical activities	0	0