

| <b>STUDY MODULE DESCRIPTION FORM</b>  |   |  |
|---|---|--|
| Name of the module/subject<br><b>History of Civil Engineering and Architecture</b>  |   | Code<br><b>1010135221010130003</b>   |
| Field of study<br><b>Enviromental Engineering Extramural Second-</b>  | Profile of study (general academic, practical)<br><b>(brak)</b> | Year /Semester<br><b>1 / 2</b>   |
| Elective path/specialty<br><b>Heating, Air Conditioning and And</b>   | Subject offered in:<br><b>Polish</b>                            | Course (compulsory, elective)<br><b>obligatory</b>   |
| Cycle of study:<br><b>Second-cycle studies</b>  | Form of study (full-time,part-time)<br><b>part-time</b>         |  |
| No. of hours<br>Lecture: <b>15</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>  |   | No. of credits<br><b>2</b>   |
| Status of the course in the study program (Basic, major, other)<br><b>(brak)</b>  |   | (university-wide, from another field)<br><b>(brak)</b>   |
| Education areas and fields of science and art<br><b>technical sciences</b><br><b>Technical sciences</b>   |   | ECTS distribution (number and %)<br><b>2 100%</b><br><b>2 100%</b>   |
| <b>Responsible for subject / lecturer:</b><br><br>dr hab. inż. Zbigniew Bromberek, prof. nadzw.<br>email: zbigniew.bromberek@put.poznan.pl<br>tel. +48 61 647 5827, +48 61 665 2438<br>Wydział Budownictwa i Inżynierii Środowiska<br>ul. Piotrowo 5 60-965 Poznań        |   |  |
| <b>Prerequisites in terms of knowledge, skills and social competencies:</b>   |   |  |
| 1   | <b>Knowledge</b>  | No prerequisites   |
| 2   | <b>Skills</b>   | Ability to see the context and analyse the engineering problem in its socio-economic, geopolitical and historical environments |
| 3   | <b>Social competencies</b>                                      | Realisation of the need for continuous life-long learning to keep the knowledge and skills up-to-date                          |
| <b>Assumptions and objectives of the course:</b><br>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 |   |  |
| <b>Study outcomes and reference to the educational results for a field of study</b>   |   |  |
| <b>Knowledge:</b>   |   |  |
| 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_W08]   |   |  |
| 3. Student knows and understands relationships between architecture and urban design, and their interactions with organisational, technical and economic possibilities - [K_W02, K_W08]   |   |  |
| <b>Skills:</b>  |   |  |
| 1. Student can recognise the basic styles characterising buildings in a given historical period and on her own find information on the subject - [K_U01, K_U05, K_U17]  |   |  |
| 2. Student can identify most important achievements in history of architecture and urban design - [K_U01]   |   |  |
| 3. Student can analyse architecture and urban design as symptoms of needs and investor - [K_U01, K_U10]   |   |  |
| <b>Social competencies:</b>   |   |  |
| 1. Student understands the need of life-long learning and appreciates variability of conditions for performing her professional tasks - [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]  |   |  |

| <b>Assessment methods of study outcomes</b>   |                      |      |
|---|----------------------|------|
| Final test: pisemny (approx. 40 questions), multiple choice, approx. 30 minutes (W_02, W_05, W_07, W_08, U_01, U_05, U_10, U_17)  |                      |      |
| Continuous assessment of progress made by students, their activity in gaining knowledge/skills (K_01, K_02, K_05)   |                      |      |
| <b>Course description</b>   |                      |      |
| <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>  |                      |      |
| <b>Basic bibliography:</b>  |                      |      |
| <ol style="list-style-type: none"> <li>1. Broniewski T Historia architektury dla wszystkich wyd. II, Ossolineum, Wrocław 1980</li> <li>2. Chmielewski JM Teoria urbanistyki w projektowaniu i planowaniu miast Wyd. Politechniki Warszawskiej, W-wa 2001</li> <li>3. Czarnecki W Planowanie miast i osiedli t.I-VI, PWN, W-wa 1965</li> <li>4. Dobrowolski T Sztuka polska Wyd. Literackie, Kraków 1974</li> <li>5. Koch W Style w architekturze Świat Książki, W-wa 1996</li> <li>6. Watkin D Historia architektury zachodniej Arkady, W-wa 2006</li> <li>7. Wróbel T Zarys historii budowy miast Ossolineum, Wrocław 1971</li> </ol>  |                      |      |
| <b>Additional bibliography:</b>   |                      |      |
| <ol style="list-style-type: none"> <li>1. Biegański P U źródeł architektury współczesnej PWN, W-wa 1972</li> <li>2. Charytonow E Zarys historii architektury wyd. VII, WSiP, W-wa 1978</li> <li>3. D?Alfonso E i Samss D Historia architektury Arkady, W-wa 1997</li> <li>4. Dobrowolski T Sztuka polska Wyd. Literackie, Kraków 1974</li> <li>5. Domański T Strategiczne planowanie rozwoju gospodarczego gminy Arkady, W-wa 2000</li> <li>6. Estreicher K Historia sztuki w zarysie wyd. VII PWN, W-wa 1986</li> <li>7. Karpowicz M Barok w Polsce Arkady, W-wa 1988</li> <li>8. Latour S i Szyski A Rozwój współczesnej myśli architektonicznej PWN, W-wa 1985</li> <li>9. Llera RR Historia architektury Buchmann, Hamburg 2008</li> <li>10. Lorentz S i Rottermund, A Klasycyzm w Polsce Arkady, W-wa 1984</li> <li>11. Maik W Podstawy geografii miast Wyd. UMK, Toruń 1992</li> <li>12. Regulski J Planowanie miast PWE, W-wa 1986</li> <li>13. Rutkowski S Planowanie przestrzenne obszarów wypoczynkowych w strefie dużych miast PWN, W-wa 1975</li> <li>14. Styrna-Bartkowiczowa K i Szafer TP Ekologia środowiska mieszkaniowego Ossolineum, K-ów 1977</li> <li>15. Szczygielski K Zarządzanie przestrzenią Wyd. WSZiA, Opole 2003</li> <li>16. Świechowski Z Sztuka romańska w Polsce Arkady, W-wa 1982</li> <li>17. Fletcher, B A history of architecture 20th ed. Architectural Press, Oxford 1996</li> <li>18. Kostof, S A history of architecture 2nd ed. Oxford University Press 1995</li> </ol> |                      |      |
| <b>Result of average student's workload</b>   |                      |      |
| Activity  | Time (working hours) |      |
| 1. Participating in lectures  | 15                   |      |
| 2. Studying the source materials (literature, internet etc.)  | 30                   |      |
| 3. Preparation for the final test   | 5                    |      |
| <b>Student's workload</b>   |                      |      |
| Source of workload  | hours                | ECTS |
| Total workload  | 50                   | 2    |

|                      |    |   |
|----------------------|----|---|
| Contact hours        | 15 | 1 |
| Practical activities | 0  | 0 |