#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

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

Course name

Fundamentals of Architecture [N1IŚrod2>PA]

Course

Year/Semester Field of study

**Environmental Engineering** 2/4

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements

elective part-time

Number of hours

Lecture Laboratory classes Other 0

10

**Tutorials** Projects/seminars

0 0

Number of credit points

1.00

Coordinators Lecturers

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#### **Prerequisites**

The ability to perceive external conditions and to analyze an engineering problem in its socio-economic, geopolitical and historical background. Awareness of the need to constantly update and supplement knowledge and skills

#### Course objective

Transfer of basic knowledge in the area of architecture design in universal designing as a context for engineer'sprofession, and typical tasks appearing in the engineering.

#### Course-related learning outcomes

#### Knowledge:

- 1. Student knows the principal objectives of architecture and urban design (in universal framing) together with the meansused to achieve them
- 2. The student knows and understands the role of formal and functional solutions in the history of architecture
- 3. The student knows and understands the relationship between architecture and urban planning in a universal sense and technical and economic possibilities

#### Skills:

- 1. The student is able to obtain the necessary information and recognize the basic features of a building characterizing a given period in the history of architecture and urban planning
- 2. The student is able to identify the most important achievements in the development of architecture and urban planning and appreciate their universal character
- 3. The student is able to analyze architecture and urban planning from a universal perspective as an expression of the needs and possibilities of the investor

#### Social competences:

- 1. The student understands the need to constantly update knowledge to the extent necessary to solve theoretical and practical problems and their context
- 2. Students can see the need for continuing to increase the depth and breadth of their knowledge

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Written final tests (approx. 30 to 40 issues), Students' activity in acquiring knowledge/skills checked during classes

### Programme content

- 1. Introduction: basic concepts in universal designing architecture, sustainable construction.
- 2. Built environment space (in universal framing): function, functionality and ergonomics in buildings.
- 3. The succession of styles as technological and material progress
- 4. History of towns and urban planning. City structure, city planning
- 5. Architectural project, Technical description,
- 6. Work tool for architectures, designers and constructions in universal framing.
- 7. Building vs human needs in universal framing: thermal comfort, light, etc.
- 8. Eco-construction. Historical buildings

### Course topics

none

#### **Teaching methods**

Information lecture, lecture with multimedia presentation

#### **Bibliography**

#### Basic:

#### Basic bibliography:

- 1. Broniewski T., Historia architektury dla wszystkich wyd. II, Ossolineum, Wrocław 1980
- 2. Czarnecki W., Planowanie miast i osiedli t.I-VI, PWN, W-wa 1965
- 3. Koch W., Style w architekturze Świat Książki, W-wa 1996
- 4. Watkin D., Historia architektury zachodniej Arkady, W-wa 2006
- 5. Wróbel T., Zarys historii budowy miast Ossolineum, Wrocław 1971
- 6. Additional
- 7. Biegański P., U źródeł architektury współczesnej PWN, W-wa 1972
- 8. Charytonow E., Zarys historii architektury wyd. VII, WSiP, W-wa 1978
- 9. DiAlfonso E, Samss D., Historia architektury Arkady, W-wa 1997
- 10. Dobrowolski T., Sztuka polska Wyd. Literackie, Kraków 1974
- 11. Estreicher K., Historia sztuki w zarysie wyd. VII PWN, W-wa 1986
- 12. Karpowicz M., Barok w Polsce Arkady, W-wa 1988
- 13. Latour S i Szymski A., Rozwój współczesnej myśli architektonicznej PWN, W-wa 1985
- 14. Lorentz S., i Rottermund, A Klasycyzm w Polsce Arkady, W-wa 1984
- 15. Świechowski Z., Sztuka romańska w Polsce Arkady, W-wa 1982
- 16. Fletcher B., A history of architecture 20th ed. Architectural Press, Oxford 1996
- 17. Kostof S., A history of architecture 2nd ed. Oxford University Press 1995

## Additional:

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# Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	10	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	15	0,50