

| STUDY MODULE DESCRIPTION FORM | | |
|---|--|---|
| Name of the module/subject Organization of Building Production | | Code 1010101141010111221 |
| Field of study Civil Engineering First-cycle Studies | Profile of study (general academic, practical) general academic | Year /Semester 2 / 4 |
| 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: 15 Laboratory: - Project/seminars: 15 | | No. of credits 5 |
| Status of the course in the study program (Basic, major, other) major | | (university-wide, from another field) from field |
| Education areas and fields of science and art technical sciences Technical sciences | | ECTS distribution (number and %) 5 100% 5 100% |
| Responsible for subject / lecturer: dr inż. Tomasz Thiel email: tomasz.thiel@put.poznan.pl tel. 616652474 Wydział Budownictwa i Inżynierii Środowiska ul. Piotrowo 5, 60-965 Poznań | | |
| Prerequisites in terms of knowledge, skills and social competencies: | | |
| 1 | Knowledge | Student knows the basics of general construction, knows the technology of various types of construction works and the technology implementation of the construction of buildings. Familiar with the basic calculation works. He knows the rules for creating and reading architectural drawings and construction. |
| 2 | Skills | Student is able to extract the construction processes within the specific technology of the works. Observations lead the implementation of various buildings with special emphasis used machinery, equipment and warehouses teams, and organization development site. Able to obtain information from the literature. Able to identify ways of calculation works. |
| 3 | Social competencies | Student independently complements and extends knowledge of new and modern technologies of construction works, how to implement the construction works with different technologies. Can describe these technologies and how to implement objects. |
| Assumptions and objectives of the course: Understanding the basics of organization and management in construction. Learning the methods of organization and planning of construction works on the examples of objects of general construction and communication. The ability to define the scope of the renovation and modernization of the existing building. Acquisition of the ability to plan the course of construction works in time and the analysis of the resources needed to carry out these works. The ability to perform site development concept. Understanding the capabilities of computer programs for the planning of works and construction projects. | | |
| Study outcomes and reference to the educational results for a field of study | | |
| Knowledge: | | |
| 1. Student knows the basics of the organization and management in relation to construction - [K_W15] | | |
| 2. Student is familiar with the organization and planning of works resulting from the adoption of technology used, type of facility, the conditions of implementation - [K_W12] | | |
| 3. Student knows the ways of describing and determining the scope of the renovation and modernization of the building - [K_W14] | | |
| 4. Student knows the rules for drawing up development plan for the site - [K_W16] | | |
| 5. Student knows the systems, the construction and building organizational structures - [K_W15] | | |
| Skills: | | |

| |
|--|
| <p>1. Student is able to identify the processes that occur at the stage of earthworks, foundations and erection related to the implementation of the selected object - [K_U14]</p> <p>2. Student can choose the line-ups working groups to carry out specific construction processes and propose the organization of the implementation of various scopes of work - [K_U05, K_U21]</p> <p>3. Student is able to build a technological and organizational network model to perform various construction schedules, an analysis of the resources needed to implement the construction work, with particular emphasis on the analysis of time-cost - [K_U05, K_U15, K_U17]</p> <p>4. Student is able to apply mathematical methods in planning construction - [K_U05]</p> <p>5. Student knows how to make the concept of development site - [K_U21]</p> |
| <p>Social competencies:</p> <p>1. Student is able to work with a technologist, cost-estimator, investor, building contractors at the stage of implementation of the network model, construction schedules, conduct necessary studies on resource requirements, preparing the site development plan - [K_K01, K_K02, K_K03, K_K06, K_K07]</p> <p>2. Student understands the importance of cooperation with the above-mentioned entities also at the stage of execution of the works and all actions that occur to putting the facility into operation - [K_K01, K_K06, K_K07]</p> <p>3. Student recognizes the need for systematic improvement of the knowledge in the field of deepening and extending their competence - [K_K03, K_K06]</p> |

| Assessment methods of study outcomes | |
|--|----------------------|
| <p>Lecture: written examination, consisting of two parts. Part 1 is designed to test the knowledge and consists of answers to six questions. Part 2 is designed to test the skills and relies on solving the two tasks.</p> <p>Classes: - written test of the material covered in the exercise</p> <p>Project classes: performance, discussion and presentation technology, including the development and organization of the work of the foundation and object assembly hall prefabricated multi-bay system.</p> <p>* Of the exercise design</p> <p>The scale of assessments determined% of:</p> <p>90 very good (A)</p> <p>85 good plus (B)</p> <p>75 good (C)</p> <p>65 sufficient plus (D)</p> <p>sufficient 52 (E)</p> <p>below 51 insufficient (F)</p> | |
| Course description | |
| <p>Fundamentals of organization and management in the construction industry. Specificity of the construction production. Methods and ways of organizing works. Determining the duration of the construction processes. Types of schedules and their purpose, principles for the preparation, construction - components. Network methods in the organization and planning of works and construction of certain facilities. The analysis of the resources needed to implement the construction processes and the entire facility. The use of mathematical methods in planning construction. Development of the site. Organizational structures construction. Systems for the construction</p> | |
| Basic bibliography: | |
| <p>1. Podstawy teorii organizacji i zarządzania, Bielski M., wyd. 2 rozszerzone, C.H. Beck, W-wa, 2004</p> <p>2. Organizacja produkcji budowlanej, Rowiński L., Arkady, Warszawa, 1982</p> <p>3. Technologia i organizacja budowy, Dyżewski A., Arkady, Warszawa, 1990</p> <p>4. Metody sieciowe w budownictwie, Biernacki J., Cyunel B., Arkady, Warszawa, 1989</p> <p>5. Podstawy organizacji budowy, Jaworski K.M., Wydawnictwo Naukowe PWN, Warszawa, 2004</p> <p>6. Zarządzanie w procesie inwestycyjnym, Werner W.A., Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa, 2008</p> | |
| Additional bibliography: | |
| <p>1. Elementy organizacji robót inżynierskich, Pisarska E., Połoński M., Wyd. SGGW, Warszawa, 2000</p> <p>2. Podstawy organizacji robót drogowych, Biruk S., Jaworski K. M., Tokarski Z., PWN, Warszawa, 2007</p> <p>3. Organizacja i planowanie budowy, Lenkiewicz W. PWN, Warszawa, 1985</p> <p>4. Podstawy zarządzania organizacjami, Griffin R.W., PWN, W-wa, wyd. 1999 lub nowsze</p> | |
| Result of average student's workload | |
| Activity | Time (working hours) |

| | | |
|---|--------------|-------------|
| 1. participation in lectures | 30 | |
| 2. participation in classes and project classes | 30 | |
| 3. preparation for classes | 15 | |
| 4. preparation for test | 15 | |
| 5. preparation for exam | 25 | |
| Student's workload | | |
| Source of workload | hours | ECTS |
| Total workload | 125 | 5 |
| Contact hours | 75 | 3 |
| Practical activities | 60 | 2 |