

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Construction planning-case study		Code 1010101171010117939
Field of study Civil Engineering First-cycle Studies	Profile of study (general academic, practical) general academic	Year /Semester 4 / 7
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) elective
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 3
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences		ECTS distribution (number and %) 3 100%
Responsible for subject / lecturer: dr inż. Bożena Kuczma email: bozena.kuczma@put.poznan.pl tel. 616652186 Faculty of Civil and Environmental Engineering ul. Piotrowo 5 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has basic knowledge about building materials, construction, technology and organization, principles of technical drawings concerning creating and reading architectural and construction drawings
2	Skills	Student is able to gain information from recommended sources. Student uses structural, material and organizational solutions to formulate and solve engineering problems using computational programmes
3	Social competencies	Student understands the necessity of constant updating broadening of knowledge of technology in civil engineering
Assumptions and objectives of the course: Examples of application of case study method in civil engineering. Evaluation of effectiveness: in terms of a building project, preparation of building site, choice proper technology and organization. Broadening and supplementation of knowledge, skills and social competencies using case study as an educational method. Professional development: flexible approach, the importance of human factors, understanding and evaluation of interpersonal relations in achieving goals.		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Student knows the method of case study, especially in terms of its application for building engineering. - [K_W12, K_W14, K_W15-] 2. Student knows the basic elements of planning and organization building enterprise according to the chosen building technology method - [K_W12, K_W14, KW_15] 3. Student knows the building processes presented in class - [K_W12, K_W14, KW_15] 4. Student knows the basic terms in the new BIM technology in terms of case study application in modelling information about the building object - [K_W11, K_W12, K_W14, K_W15] 5. Student knows what it takes to plan a building site and what the construction of the building processes are - [K_W11, K_W12, K_W14, K_W15]		
Skills: 1. Student is able to use the method of case study to solve problems in civil engineering - [K_16, K_U17] 2. Student is able to compare results of the research problems in civil engineering - [K_U17, K_U19, K_U21] 3. Student understands the relationship between planning and realization of the investment process - [K_U19, K_U20, K_U21]		
Social competencies:		

<ol style="list-style-type: none"> 1. Student is able to co-operate in a group - [K_K01, K_K05] 2. Student understands the need of gaining information to realize the investment process - [K_K01, K_K02,K_K08] 3. Student is able to present the results of his own work - [K_K07, K_K08,K_K010] 4. Student understands the need for continuous learning, can inspire and organize the process of learning of other people - [K_K03, K_K06]

Assessment methods of study outcomes	
<p>Written exam (duration max.120 min.) Written case study. This project task should be passed on an individual basis.</p> <p>Scale of the evaluation (%):</p> <p>90-100 excellent (A) 85-89 good (B) 75-84 average (C) 65-74 passing (D) 51-64 nearly failed (E) 50 failed (F)</p>	
Course description	
<p>The conditions that enable the start of the building process. Preparation of the building site. Planning the order of particular building process. Finishing work. The end of the building process. The concept of case study. The stages of case study. The implementation of the case study method. Pros and caus of case study method. Examples of the case study in building engineering.</p>	
<p>Basic bibliography:</p> <ol style="list-style-type: none"> 1. W. Korzeniewski, R. Korzeniewski, Warunki techniczne dla budynków i ich usytuowanie, przepisy z komentarzem i 180 rysunkami. Wyd. 11 rozszerzone. POLCEN. Warszawa 2016 2. Grzegorzczak W., Formułowanie strategii marketingowej przedsiębiorstwa. Kreowanie i realizacja strategii marketingowych przedsiębiorstwa. Studia przypadków, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2016, s. 11-38. 3. Grzegorzczak W., Wybrane problemy zarządzania i finansów. Studia przypadków, Wydawnictwo Uniwersytetu Łódzkiego , Łódź 2015, s. 9-16. 4. A. Tomana, BIM. Innowacyjna technologia w budownictwie. Podstawy, standardy, narzędzia. Kserkop, Kraków 2015 5. L. Ustinovičius, D. Walasek, R. Rasiulis, J. Cepurnaite, Wdrażanie technologii informacyjnych w budownictwie- praktyczne studium przypadku. Ekonomia i Zarządzanie 2015/ Vol.7,nr 1/ 290-310 6. Rowiński L., Organizacja produkcji budowlanej. Arkady, Warszawa 1982 7. Lenkiewicz W., Organizacja i planowanie budowy, PWN, Warszawa, 1985 8. Dyżewski A., Technologia i organizacja budowy. Arkady, Warszawa 1990 9. Jaworski K.M., Podstawy organizacji budowy. Wydawnictwo Naukowe PWN, Warszawa 2009 10. Praca zbiorowa pod kierunkiem prof. dr. hab. inż. Leonarda Runkiewicza, Vademecum Projektanta. Podstawy projektowania konstrukcji budowlanych. 	
<p>Additional bibliography:</p> <ol style="list-style-type: none"> 1. Organizacja procesów inwestycyjno-budowlanych, T. Biliński, J. Czachorowski, IPB, Warszawa 2001 2. Klimas M., Mróz T.M., Wielokryterialna analiza wyboru systemu ogrzewczo-wentylacyjnego budynku pasywnego, czasopismo Instal nr 3/2011 3. Yin R.K., Case Study Research .Design and Methods. Fifth Edition. SAGE Publishing, London 2013 4. Delatte N.J.Jr, Beyond Failure: Forensic Case Study for Civil Engineers, ASCE Press 2008 	
Result of average student's workload	
Activity	Time (working hours)

1. Participation in lectures (contact hours)	30	
2. Exercises before the project (study on one	30	
3. Exercises before the final exam (study on one	25	
4. Participation in the feedback session (consultations) related to the student	2	
Student's workload		
Source of workload	hours	ECTS
Total workload	87	3
Contact hours	32	2
Practical activities	2	1