

POLITECHNIKA KRAKOWSKA IM. TADEUSZA KOŚCIUSZKI

KARTA PRZEDMIOTU

obowiązuje studentów rozpoczynających studia w roku akademickim 2022/2023

Wydział Inżynierii Lądowej

Kierunek studiów: Budownictwo

Profil: Ogólnoakademicki

Forma studiów: stacjonarne

Kod kierunku: BUD

Stopień studiów: I

Specjalności: Bez specjalności - studia w języku angielskim

1 INFORMACJE O PRZEDMIOCIE

NAZWA PRZEDMIOTU	Dokumentacja przetargowa i kosztowa w przedsięwzięciu budowlanym
NAZWA PRZEDMIOTU W JĘZYKU ANGIELSKIM	Tender and cost documentation for construction project
KOD PRZEDMIOTU	WIL BUD oIS E7161 22/23
KATEGORIA PRZEDMIOTU	Przedmioty związane z dyplomem
LICZBA PUNKTÓW ECTS	3.00
SEMESTRY	6

2 RODZAJ ZAJĘĆ, LICZBA GODZIN W PLANIE STUDIÓW

SEMESTR	WYKŁAD	ĆWICZENIA AUDYTORYJNE	LABORATORIA	LABORATORIA KOMPUTERO- WE	PROJEKTY	SEMINARIUM
6	15	0	0	0	30	0

3 CELE PRZEDMIOTU

Cel 1 Transfer of knowledge regarding the tender and cost documentation required in Poland for construction enterprises.

Cel 2 Acquiring practical skills in preparing tender documentation and making cost estimates and preparing students for scientific research in the field of construction enterprises costs.

Cel 3 Preparing students for individual and team work in creating tender documentation and preparing cost estimates.

4 WYMAGANIA WSTĘPNE W ZAKRESIE WIEDZY, UMIEJĘTNOŚCI I INNYCH KOMPETENCJI

5 EFEKTY KSZTAŁCENIA

EK1 Wiedza Tender documentation for construction projects

EK2 Wiedza Cost documentation for construction projects

EK3 Umiejętności Preparation of documentation describing the subject of the contract and making cost estimates

EK4 Kompetencje społeczne Individual and team work in preparation of tender and cost documentation

6 TREŚCI PROGRAMOWE

PROJEKTY		
LP	TEMATYKA ZAJĘĆ OPIS SZCZEGÓŁOWY BLOKÓW TEMATYCZNYCH	LICZBA GODZIN
P1	Tender specification - project	6
P2	Functional-utility program - project	8
P3	Performing a cost estimate in the form of PKPP + PKRB based on a functional and utility program	8
P4	Preparation of the cost estimate for selected construction works based on the design documentation.	8

WYKŁAD		
LP	TEMATYKA ZAJĘĆ OPIS SZCZEGÓŁOWY BLOKÓW TEMATYCZNYCH	LICZBA GODZIN
W1	Project delivery methods of construction projects.	2
W2	Tender specification.	2
W3	Design documentation in the design and build system.	2
W4	Design documentation in a traditional system.	2
W5	The budget of the construction. Preliminary cost studies.	2
W6	Cost estimations in design and build system.	2
W7	Cost estimations in the traditional system.	3

7 NARZĘDZIA DYDAKTYCZNE

N1 multimedia presentations

N2 Price bulletins and other book materials

N3 Project documentation in paper and electronic form (PDF, DWG)

8 OBCIĄŻENIE PRACĄ STUDENTA

FORMA AKTYWNOŚCI	ŚREDNIA LICZBA GODZIN NA ZREALIZOWANIE AKTYWNOŚCI
Godziny kontaktowe z nauczycielem akademickim, w tym:	
Godziny wynikające z planu studiów	45
Konsultacje przedmiotowe	1
Egzaminy i zaliczenia w sesji	2
Godziny bez udziału nauczyciela akademickiego wynikające z nakładu pracy studenta, w tym:	
Przygotowanie się do zajęć, w tym studiowanie zalecanej literatury	20
Opracowanie wyników	10
Przygotowanie raportu, projektu, prezentacji, dyskusji	4
SUMARYCZNA LICZBA GODZIN DLA PRZEDMIOTU WYNIKAJĄCA Z CAŁEGO NAKŁADU PRACY STUDENTA	82
SUMARYCZNA LICZBA PUNKTÓW ECTS DLA PRZEDMIOTU	3.00

9 SPOSOBY OCENY

OCENA FORMUJĄCA

F1 Completion of the lecture in the form of a test

F2 Project evaluation

OCENA PODSUMOWUJĄCA

P1 Average rating weight

WARUNKI ZALICZENIA PRZEDMIOTU

W1 passing lecture part

W2 passing project part

W3 Presence for min. 80% of project classes

KRYTERIA OCENY

EFEKT KSZTAŁCENIA 1	
NA OCENĘ 2.0	Lack of knowledge of basic differences between the project delivery systems of construction enterprises. Knowledge of SIWZ content, content of project documentation, STWiORB.
NA OCENĘ 3.0	The student should be able to correctly prepare the Terms of Reference and PFU. The student should correctly calculate the cost of design work without taking into account the allowances and correction factors, the index calculation of the cost of construction works and a simple offer cost estimate.
NA OCENĘ 3.5	The student should be able to correctly prepare the Terms of Reference and PFU. The student should correctly calculate the cost of design work without taking into account the allowances and correction factors, the index calculation of the cost of construction works and a simple offer cost estimate.
NA OCENĘ 4.0	The student should be able to correctly prepare the Terms of Reference and PFU. The student should correctly calculate the cost of design work, taking into account the allowances and correction factors, the index calculation of the cost of construction works and a simple offer cost estimate.
NA OCENĘ 4.5	The student should be able to prepare correctly and in detail the Terms of Reference and PFU. The student should correctly calculate the cost of design work, taking into account the allowances and correction factors, the index calculation of the cost of construction works and an advanced offer cost estimate with variant analyzes and conclusions from the analyzes with minor errors.
NA OCENĘ 5.0	The student should be able to prepare correctly and in detail the Terms of Reference and PFU. The student should correctly calculate the cost of design work, taking into account the allowances and correction factors, the index calculation of the cost of construction works and an advanced offer cost estimate with variant analyzes and conclusions from the analyzes.
EFEKT KSZTAŁCENIA 2	
NA OCENĘ 2.0	Lack of knowledge of the basic differences between the systems for the implementation of construction projects. Knowledge of the content of the Terms of Reference, the content of design documentation, STWiORB.
NA OCENĘ 3.0	Knowledge and ability to perform simple cost estimates based on PFU and project documentation. The student should be able to indicate the difference between the investor's and offer estimate.
NA OCENĘ 3.5	Knowledge of the basic differences between the systems for the implementation of construction projects. Knowledge of the content of the Terms of Reference, the content of design documentation, STWiORB.
NA OCENĘ 4.0	The student should be able to prepare correctly and in detail the Terms of Reference and PFU. The student should correctly calculate the cost of design work, taking into account the allowances and correction factors, the index calculation of the cost of construction works and an advanced offer cost estimate with variant analyzes and conclusions from the analyzes with minor errors.

NA OCENĘ 4.5	The student should be able to prepare correctly and in detail the Terms of Reference and PFU. The student should correctly calculate the cost of design work, taking into account the allowances and correction factors, the index calculation of the cost of construction works and an advanced offer cost estimate with variant analyzes and conclusions from the analyzes with minor errors.
NA OCENĘ 5.0	The student should be able to prepare correctly and in detail the Terms of Reference and PFU. The student should correctly calculate the cost of design work, taking into account the allowances and correction factors, the index calculation of the cost of construction works and an advanced offer cost estimate with variant analyzes and conclusions from the analyzes.
EFEKT KSZTAŁCENIA 3	
NA OCENĘ 2.0	Lack of knowledge and skills to make simple cost estimates based on PFU and project documentation. The student should be able to indicate the differences between the investor's cost estimate and the offer.
NA OCENĘ 3.0	The student should be able to draw up the Terms of Reference and PFU correctly. The student should correctly calculate the cost of design work without taking into account additions and correction factors, indicative calculation of the cost of construction works and a simple offer cost estimate.
NA OCENĘ 3.5	Knowledge and ability to make simple cost estimates based on PFU and project documentation. The student should be able to indicate the differences between the investor's cost estimate and the offer
NA OCENĘ 4.0	Knowledge and ability to make simple and complex cost estimates based on PFU and project documentation. The student should be able to indicate the differences between the investor's cost estimate and the offer and preliminary estimates.
NA OCENĘ 4.5	Knowledge and ability to make complex cost estimates based on PFU and project documentation. The student should be able to indicate the differences between the investor's cost estimate and the offer and preliminary estimates. The student should be able to perform variant cost analyzes with minor errors and be able to analyze them and draw appropriate conclusions.
NA OCENĘ 5.0	Knowledge and ability to make complex cost estimates based on PFU and project documentation. The student should be able to indicate the differences between the investor's cost estimate and the offer and preliminary estimates. The student should be able to perform variant cost analyzes and be able to analyze them and draw appropriate conclusions.
EFEKT KSZTAŁCENIA 4	
NA OCENĘ 2.0	The student is not able to carry out individually correctly projects relating to project documentation and simple preliminary cost estimates. The student does not show commitment to team work related to the preparation of the PFU and the offer cost estimate.
NA OCENĘ 3.0	The student should perform correctly individual projects relating to the project documentation and simple preliminary cost estimate. The student should show at least a minimal involvement in teamwork related to the preparation of PFU and the offer cost estimate.

NA OCENĘ 3.5	The student should carry out individually correctly projects concerning project documentation and simple preliminary cost estimates. The student should show at least minimal involvement in teamwork related to the preparation of the PFU and the offer cost estimate.
NA OCENĘ 4.0	The student should make individual projects with errors and errors that do not significantly affect the quality of the documentation, regarding the design documentation and preliminary cost estimates. The student should at least show commitment to teamwork related to the preparation of the PFU and the offer cost estimate.
NA OCENĘ 4.5	The student should make individual projects concerning the project documentation and preliminary cost estimates without major errors. The student should show at least a great commitment to teamwork related to the preparation of the PFU and the offer cost estimate.
NA OCENĘ 5.0	The student should make individual projects regarding the project documentation and preliminary cost estimates without major errors. The student should show at least a great commitment to teamwork related to the preparation of PFU and the offer cost estimate and be the leader of his team.

10 MACIERZ REALIZACJI PRZEDMIOTU

EFEKT KSZTAŁCENIA	ODNIESIENIE DANEGO EFEKTU DO SZCZEGÓLOWYCH EFEKTÓW ZDEFINIOWANYCH DLA PROGRAMU	CELE PRZEDMIOTU	TREŚCI PROGRAMOWE	NARZĘDZIA DYDAKTYCZNE	SPOSOBY OCENY
EK1	K_W15 K_W18	Cel 1	w1 w2 w3 w4	N1	F1 P1
EK2	K_W15 K_W18	Cel 1	w5 w6 w7	N1 N2	F1 P1
EK3	K_U15	Cel 2	p1 p2 p3 p4	N2 N3	F2 P1
EK4	K_K01 K_K02 K_K03	Cel 3	p1 p2 p3 p4	N2 N3	F2 P1

11 WYKAZ LITERATURY

LITERATURA PODSTAWOWA

- [1] **Kozik R., Lesniak A., Plebankiewicz E., Zima K.** — *Dokumentacja przetargowa i kosztowa w budowlanym procesie inwestycyjnym*, Kraków, 2015, Wydawnictwo PK
- [2] **AutorPeurifoy, Robert L; Oberlender, Garold D.** — *Estimating construction costs*, New York, 2014, McGraw-Hill Publishing Company

12 INFORMACJE O NAUCZYCIELACH AKADEMICKICH

OSOBA ODPOWIEDZIALNA ZA KARTĘ

dr hab. inż. prof. PK Krzysztof Zima (kontakt: kzima@izwbit.pk.edu.pl)

OSOBY PROWADZĄCE PRZEDMIOT

1 dr hab. inż. prof. PK Krzysztof Zima (kontakt: kzima@17.pk.edu.pl)

2 prof. dr hab. inż. Edyta Plebankiewicz (kontakt: eolebank@17.pk.edu.pl)

3 dr hab. inż. prof. PK Agnieszka Leśniak (kontakt: alesniak@17.pk.edu.pl)

4 dr inż. Damian Wieczorek (kontakt: dwieczorek@17.pk.edu.pl)

5 dr inż., prof. PK Renata Kozik (kontakt: rkozik@17.pk.edu.pl)

6 mgr inż. Ewelina Mitera-Kielbasa (kontakt: emitera@17.pk.edu.pl)

7 mgr inż. Sebastian Biel (kontakt: sbiel@17.pk.edu.pl)

13 ZATWIERDZENIE KARTY PRZEDMIOTU DO REALIZACJI

(miejsowość, data)

(odpowiedzialny za przedmiot)

(dziekan)

PRZYJMUJĘ DO REALIZACJI (data i podpisy osób prowadzących przedmiot)

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