

POLITECHNIKA KRAKOWSKA IM. TADEUSZA KOŚCIUSZKI

KARTA PRZEDMIOTU

obowiązuje studentów rozpoczynających studia w roku akademickim 2023/2024

Wydział Inżynierii Lądowej

Kierunek studiów: Budownictwo

Profil: Ogólnoakademicki

Forma studiów: stacjonarne

Kod kierunku: BUD

Stopień studiów: II

Specjalności: Structural Design and Management in Civil Engineering (profile: Construction Technology and Management), Structural Design and Management in Civil Engineering (profile: Structural Design)

1 INFORMACJE O PRZEDMIOCIE

NAZWA PRZEDMIOTU	Oszacowania kosztowe w inżynierii lądowej
NAZWA PRZEDMIOTU W JĘZYKU ANGIELSKIM	Cost Estimates in Civil Engineering
KOD PRZEDMIOTU	WIL BUD oIIS D4 23/24
KATEGORIA PRZEDMIOTU	Specjalty subjects
LICZBA PUNKTÓW ECTS	2.00
SEMESTRY	1

2 RODZAJ ZAJĘĆ, LICZBA GODZIN W PLANIE STUDIÓW

SEMESTR	WYKŁAD	ĆWICZENIA AUDYTORYJNE	LABORATORIA	LABORATORIA KOMPUTERO- WE	PROJEKTY	SEMINARIUM
1	15	0	0	15	0	0

3 CELE PRZEDMIOTU

Cel 1 To educate students on development of cost estimates and analyses for design works and construction works in various phases of construction project.

Cel 2 To provide knowledge related to cost estimates and analyses in the whole life cycle of construction object.

Cel 3 To enable students to acquire the competencies of individual and team-based development of cost estimates and analyses for design works and construction works in various phases of construction project. To prepare students (at a basic level) for conducting research on the issues related to cost estimates and analyses in various phases of construction project.

4 WYMAGANIA WSTĘPNE W ZAKRESIE WIEDZY, UMIEJĘTNOŚCI I INNYCH KOMPETENCJI

1 Fulfillment of the requirements according to the the study regulations at Cracow University of Technology. Fulfillment of formalities and procedures at Faculty of Civil Engineering, Cracow University of Technology.

5 EFEKTY KSZTAŁCENIA

EK1 Wiedza Knowledge of the cost estimates and analyses of design works and construction works for various kinds of construction objects.

EK2 Umiejętności Ability to develop cost estimates and analyses of design works.

EK3 Umiejętności Ability to develop cost estimates and analyses of construction works.

EK4 Kompetencje społeczne Ability to work individually and in team while solving problems related to cost estimates and analyses of design works and construction works. Ability to work individually and in team during research.

6 TREŚCI PROGRAMOWE

LABORATORIA KOMPUTEROWE		
LP	TEMATYKA ZAJĘĆ OPIS SZCZEGÓŁOWY BLOKÓW TEMATYCZNYCH	LICZBA GODZIN
K1	Cost estimates and analyses for selected cases of design works and construction works. Construction project budget estimates.	7
K2	Investor's cost estimates for selected cases. Bidding estimates for selected cases.	8

WYKŁAD		
LP	TEMATYKA ZAJĘĆ OPIS SZCZEGÓŁOWY BLOKÓW TEMATYCZNYCH	LICZBA GODZIN
W1	Methods on cost estimation of design works for buildings and civil engineering objects.	4
W2	Initial cost estimates - budget of construction project.	4
W3	Investor's cost estimates.	2
W4	Bidding cost estimates. Development of bidding offers.	2
W5	Cost estimates of additional works, cost estimates for alterations, cost estimates provided after completion of construction works.	3

7 NARZĘDZIA DYDAKTYCZNE

N1 Computer laboratories

N2 Lectures, multimedia presentations

N3 E-learning

8 OBCIĄŻENIE PRACĄ STUDENTA

FORMA AKTYWNOŚCI	ŚREDNIA LICZBA GODZIN NA ZREALIZOWANIE AKTYWNOŚCI
Godziny kontaktowe z nauczycielem akademickim, w tym:	
Godziny wynikające z planu studiów	30
Konsultacje przedmiotowe	2
Egzaminy i zaliczenia w sesji	4
Godziny bez udziału nauczyciela akademickiego wynikające z nakładu pracy studenta, w tym:	
Przygotowanie się do zajęć, w tym studiowanie zalecanej literatury	5
Opracowanie wyników	10
Przygotowanie raportu, projektu, prezentacji, dyskusji	5
SUMARYCZNA LICZBA GODZIN DLA PRZEDMIOTU WYNIKAJĄCA Z CAŁEGO NAKŁADU PRACY STUDENTA	56
SUMARYCZNA LICZBA PUNKTÓW ECTS DLA PRZEDMIOTU	2.00

9 SPOSOBY OCENY

OCENA FORMUJĄCA

F1 Grade on computer laboratory classes.

F2 Grades on individual and/or team assignments.

OCENA PODSUMOWUJĄCA

P1 Final test.

WARUNKI ZALICZENIA PRZEDMIOTU

W1 Completion of given tasks and assignments within the deadlines. Positive grade on final test.

W2 Presence during classes (frequency min. 80%)

KRYTERIA OCENY

EFEKT KSZTAŁCENIA 1	
NA OCENĘ 2.0	x
NA OCENĘ 3.0	<p>Student has knowledge about initial cost estimates, estimating budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works. Student is able to present, discuss and share knowledge about initial cost estimates, estimating budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works on a level. Student has knowledge of the cost estimates and analyses of design works and construction works for various kinds of construction objects. Student is able to present, discuss and share knowledge about cost estimates and analyses for design works and construction works in various phases of construction project on a level. Student has ability and skills on development and analyses of budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works on a level.</p>
NA OCENĘ 3.5	<p>Student has knowledge about initial cost estimates, estimating budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works. Student is able to present, discuss and share knowledge about initial cost estimates, estimating budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works on a level. Student has knowledge of the cost estimates and analyses of design works and construction works for various kinds of construction objects. Student is able to present, discuss and share knowledge about cost estimates and analyses for design works and construction works in various phases of construction project on a level. Student has ability and skills on development and analyses of budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works on a level.</p>
NA OCENĘ 4.0	<p>Student has knowledge about initial cost estimates, estimating budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works. Student is able to present, discuss and share knowledge about initial cost estimates, estimating budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works on a level. Student has knowledge of the cost estimates and analyses of design works and construction works for various kinds of construction objects. Student is able to present, discuss and share knowledge about cost estimates and analyses for design works and construction works in various phases of construction project on a level. Student has ability and skills on development and analyses of budget of a construction project, investors estimates and cost estimates of additional works, alteration cost estimates and cost estimates provided after completion of construction works on a level.</p>

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EFEKT KSZTAŁCENIA 2	
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EFEKT KSZTAŁCENIA 4	
NA OCENĘ 2.0	x

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10 MACIERZ REALIZACJI PRZEDMIOTU

EFEKT KSZTAŁCENIA	ODNIESIENIE DANEGO EFEKTU DO SZCZEGÓLOWYCH EFEKTÓW ZDEFINIOWANYCH DLA PROGRAMU	CELE PRZEDMIOTU	TREŚCI PROGRAMOWE	NARZĘDZIA DYDAKTYCZNE	SPOSOBY OCENY
EK1		Cel 1 Cel 2 Cel 3	w1 w2 w3 w4 w5	N2 N3	F2 P1
EK2		Cel 3	k1 k2	N1	F1 F2
EK3		Cel 1 Cel 2 Cel 3	k1 k2 w1 w2 w3 w4 w5	N1 N2 N3	F1 F2 P1
EK4		Cel 1 Cel 2 Cel 3	k1 k2 w1 w2 w3 w4 w5	N1 N2 N3	F1 F2 P1

EFEKT KSZTAŁCENIA	ODNIESIENIE DANEGO EFEKTU DO SZCZEGÓŁOWYCH EFEKTÓW ZDEFINIOWANYCH DLA PROGRAMU	CELE PRZEDMIOTU	TREŚCI PROGRAMOWE	NARZĘDZIA DYDAKTYCZNE	SPOSOBY OCENY
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11 WYKAZ LITERATURY

LITERATURA PODSTAWOWA

- [1] **Kozik, Renata; Lesniak, Agnieszka; Plebankiewicz, Edyta; Zima, Krzysztof** — *Dokumentacja przetargowa i kosztowa w budowlanym procesie inwestycyjnym*, Kraków, 2015, Wydawnictwo PK
- [2] **Robert R. Puerifoy, Garold D. Oberlender** — *Estimating Construction Costs*, International Edition, 2014, McGraw Hill
- [3] **David Jagger, Andrew Ross, Jim Smith, Peter Love** — *Building Design Cost Management*, International Edition, 2002, Wiley-Blackwell
- [4] **IPB** — *Środowiskowe zasady wycen prac projektowych*, Warszawa, 2016, IPB
- [5] **Autor Plebankiewicz, Edyta** — *Podstawy kosztorysowania robót budowlanych*, Kraków, 2007, Wydawnictwo PK
- [6] **Kacprzyk, Balbina Aniela; Kacprzyk, Zbigniew; Staśkiewicz, Kazimierz** — *Kosztorysowanie obiektów i robót budowlanych*, Warszawa, 2010, Polcen

LITERATURA UZUPEŁNIAJĄCA

- [1] **Kowalczyk, Zdzisław; Zabielski, Jace** — *Kosztorysowanie i normowanie w budownictwie*, Warszawa, 2005, WSiP
- [2] **Rajczyk, Marlena** — *Kosztorysowanie robót budowlanych*, Częstochowa, 2009, Wydawnictwo Politechniki Częstochowskiej

LITERATURA DODATKOWA

- [1] - — *Rozporządzenie Ministra Infrastruktury z dnia 18 maja 2004 r. w sprawie określenia metod i podstaw sporządzania kosztorysu inwestorskiego, obliczania planowanych kosztów prac projektowych oraz planowanych kosztów robót budowlanych określonych w programie funkcjonalno-użytkowym*, Warszawa, 2004, MIN. INFRASTRUKTURY

12 INFORMACJE O NAUCZYCIELACH AKADEMICKICH

OSOBA ODPOWIEDZIALNA ZA KARTĘ

dr inż. Michał Juszczyk (kontakt: mjuszczuk@L7.pk.edu.pl)

OSOBY PROWADZĄCE PRZEDMIOT

- 1 dr hab. inż., prof. PK Edyta Plebankiewicz (kontakt: eplebank@L7.pk.edu.pl)
- 2 dr hab. inż., prof. PK Krzysztof Zima (kontakt: kzima@L7.pk.edu.pl)
- 3 dr hab. inż. Michał Juszczyk (kontakt: mjuszczyk@L7.pk.edu.pl)
- 4 dr inż. Damian Wieczorek (kontakt: dwieczorek@L7.pk.edu.pl)
- 5 mgr inż. Ewelina Mitera-Kiełbasa (kontakt: emitera@L7.pk.edu.pl)
- 5 mgr inż. Sebastian Biel (kontakt: sbiel@L7.pk.edu.pl)
- 6 dr hab. inż., prof. PK Agnieszka Leśniak (kontakt: alesniak@L7.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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