

# POLITECHNIKA KRAKOWSKA IM. TADEUSZA KOŚCIUSZKI

## KARTA PRZEDMIOTU

obowiązuje studentów rozpoczynających studia w roku akademickim 2014/2015

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                        | Komputerowe wspomaganie zarządzania przedsiębiorstw budowlanych |
| NAZWA PRZEDMIOTU<br>W JĘZYKU ANGIELSKIM | Computer aided construction project management                  |
| KOD PRZEDMIOTU                          | WIL BUD oIS E1 14/15                                            |
| KATEGORIA PRZEDMIOTU                    | Przedmioty związane z dyplomem                                  |
| LICZBA PUNKTÓW ECTS                     | 4.00                                                            |
| SEMESTRY                                | 7                                                               |

### 2 RODZAJ ZAJĘĆ, LICZBA GODZIN W PLANIE STUDIÓW

| SEMESTR | WYKŁAD | ĆWICZENIA<br>AUDYTORYJNE | LABORATORIA | LABORATORIA<br>KOMPUTERO-<br>WE | PROJEKTY | SEMINARIUM |
|---------|--------|--------------------------|-------------|---------------------------------|----------|------------|
| 7       | 0      | 0                        | 0           | 30                              | 0        | 0          |

### 3 CELE PRZEDMIOTU

**Cel 1** Providing students with basic information related to the construction project management.

**Cel 2** Getting students acquainted with the chosen computer applications internal structure of various groups of materials and the ways they react to the factors acting on them during their lifetime. **Cel 3** Getting students acquainted with the general rules of production, properties and the application of particular building materials

and products. Cel 4 Getting students acquainted with the basic properties of building materials and products as well as the methods of laboratory assessment of them. Cel 5 Preparing students for teamwork.

**Cel 3** Preparing students for teamwork and solving simple problems within the field of planning and managing construction projects with use of chosen computer applications.

## 4 WYMAGANIA WSTĘPNE W ZAKRESIE WIEDZY, UMIEJĘTNOŚCI I INNYCH KOMPETENCJI

1 Completed Construction Supervision, Occupational Safety and Health course and Cost Estimation course.

## 5 EFEKTY KSZTAŁCENIA

**EK1 Wiedza** Student has basic knowledge about the construction project management.

**EK2 Umiejętności** Student is able to prepare a plan of realization of a sequence of construction works with use of chosen computer applications.

**EK3 Umiejętności** Student is able to analyze a plan of realization of a sequence of construction works with use of chosen computer applications.

**EK4 Kompetencje społeczne** Student is able to teamwork while solving problems of construction works planning. Student is also able to present results of her/his work to the audience.

## 6 TREŚCI PROGRAMOWE

| LABORATORIA KOMPUTEROWE |                                                                                                                                                          |                  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| LP                      | TEMATYKA ZAJĘĆ<br>OPIS SZCZEGÓŁOWY BLOKÓW TEMATYCZNYCH                                                                                                   | LICZBA<br>GODZIN |
| <b>K1</b>               | Introduction to computer aided construction planning and management.                                                                                     | 4                |
| <b>K2</b>               | Presentation of main functions of chosen computer applications aiding construction planning and management.                                              | 8                |
| <b>K3</b>               | Computer aided construction planning - preparation of programs of construction works sequences (teamwork) - with use of of chosen computer applications. | 8                |
| <b>K4</b>               | Computer aided construction planning - optimization of programs with use of of chosen computer applications..                                            | 2                |
| <b>K5</b>               | Computer aided construction planning - program tracking with use of of chosen computer applications..                                                    | 2                |
| <b>K6</b>               | Students' presentations and discussion of prepared programs.                                                                                             | 6                |

## 7 NARZĘDZIA DYDAKTYCZNE

**N1** Ćwiczenia laboratoryjne

**N2** Prezentacje multimedialne

**N3** Praca w grupach

**N4** Praca na komputerze

## 8 OBCIĄŻENIE PRACĄ STUDENTA

| FORMA AKTYWNOŚCI                                                                                 | ŚREDNIA LICZBA GODZIN<br>NA ZREALIZOWANIE<br>AKTYWNOŚCI |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <b>Godziny kontaktowe z nauczycielem akademickim, w tym:</b>                                     |                                                         |
| Godziny wynikające z planu studiów                                                               | 30                                                      |
| Konsultacje przedmiotowe                                                                         | 0                                                       |
| Egzaminy i zaliczenia w sesji                                                                    | 0                                                       |
| <b>Godziny bez udziału nauczyciela akademickiego wynikające z nakładu pracy studenta, w tym:</b> |                                                         |
| Przygotowanie się do zajęć, w tym studiowanie zalecanej literatury                               | 10                                                      |
| Opracowanie wyników                                                                              | 10                                                      |
| Przygotowanie raportu, projektu, prezentacji, dyskusji                                           | 10                                                      |
| <b>SUMARYCZNA LICZBA GODZIN DLA PRZEDMIOTU WYNIKAJĄCA Z<br/>CAŁEGO NAKŁADU PRACY STUDENTA</b>    | <b>60</b>                                               |
| SUMARYCZNA LICZBA PUNKTÓW ECTS DLA PRZEDMIOTU                                                    | 4.00                                                    |

## 9 SPOSOBY OCENY

For the computer laboratory assignments students get "pass" only.

### OCENA FORMUJĄCA

**F1** Projekt zespołowy

**F2** Sprawozdanie z ćwiczenia laboratoryjnego

### OCENA PODSUMOWUJĄCA

**P1** Test

### WARUNKI ZALICZENIA PRZEDMIOTU

**W1** To be allowed to take final test student must complete the computer laboratory assignment.

### OCENA AKTYWNOŚCI BEZ UDZIAŁU NAUCZYCIELA

**B1** Inne

### KRYTERIA OCENY

| EFEKT KSZTAŁCENIA 1 |                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| NA OCENĘ 3.0        | completing all tasks and passing all tests with minimum: 50% of correct answers in the 1st term and 60% of correct answers in the 2nd term |
| NA OCENĘ 3.5        | completing all tasks and passing all tests with minimum: 60% of correct answers in the 1st term and 75% of correct answers in the 2nd term |
| NA OCENĘ 4.0        | completing all tasks and passing all tests with minimum: 70% of correct answers in the 1st term and 85% of correct answers in the 2nd term |
| NA OCENĘ 4.5        | completing all tasks and passing all tests with minimum: 80% of correct answers in the 1st term and 90% of correct answers in the 2nd term |
| NA OCENĘ 5.0        | completing all tasks and passing all tests with minimum: 90% of correct answers in the 1st term and 95% of correct answers in the 2nd term |
| EFEKT KSZTAŁCENIA 2 |                                                                                                                                            |
| NA OCENĘ 3.0        | completing all tasks and passing all tests with minimum: 50% of correct answers in the 1st term and 60% of correct answers in the 2nd term |
| NA OCENĘ 3.5        | completing all tasks and passing all tests with minimum: 60% of correct answers in the 1st term and 75% of correct answers in the 2nd term |
| NA OCENĘ 4.0        | completing all tasks and passing all tests with minimum: 70% of correct answers in the 1st term and 85% of correct answers in the 2nd term |
| NA OCENĘ 4.5        | completing all tasks and passing all tests with minimum: 80% of correct answers in the 1st term and 90% of correct answers in the 2nd term |
| NA OCENĘ 5.0        | completing all tasks and passing all tests with minimum: 90% of correct answers in the 1st term and 95% of correct answers in the 2nd term |
| EFEKT KSZTAŁCENIA 3 |                                                                                                                                            |
| NA OCENĘ 3.0        | completing all tasks and passing all tests with minimum: 50% of correct answers in the 1st term and 60% of correct answers in the 2nd term |
| NA OCENĘ 3.5        | completing all tasks and passing all tests with minimum: 60% of correct answers in the 1st term and 75% of correct answers in the 2nd term |
| NA OCENĘ 4.0        | completing all tasks and passing all tests with minimum: 70% of correct answers in the 1st term and 85% of correct answers in the 2nd term |
| NA OCENĘ 4.5        | completing all tasks and passing all tests with minimum: 80% of correct answers in the 1st term and 90% of correct answers in the 2nd term |
| NA OCENĘ 5.0        | completing all tasks and passing all tests with minimum: 90% of correct answers in the 1st term and 95% of correct answers in the 2nd term |
| EFEKT KSZTAŁCENIA 4 |                                                                                                                                            |
| NA OCENĘ 3.0        | completing all tasks and passing all tests with minimum: 50% of correct answers in the 1st term and 60% of correct answers in the 2nd term |
| NA OCENĘ 3.5        | completing all tasks and passing all tests with minimum: 60% of correct answers in the 1st term and 75% of correct answers in the 2nd term |

|              |                                                                                                                                            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| NA OCENĘ 4.0 | completing all tasks and passing all tests with minimum: 70% of correct answers in the 1st term and 85% of correct answers in the 2nd term |
| NA OCENĘ 4.5 | completing all tasks and passing all tests with minimum: 80% of correct answers in the 1st term and 90% of correct answers in the 2nd term |
| NA OCENĘ 5.0 | completing all tasks and passing all tests with minimum: 90% of correct answers in the 1st term and 95% of correct answers in the 2nd term |

## 10 MACIERZ REALIZACJI PRZEDMIOTU

| EFEKT KSZTAŁCENIA | ODNIESIENIE DANEGO EFEKTU DO SZCZEGÓŁOWYCH EFEKTÓW ZDEFINIOWANYCH DLA PROGRAMU | CELE PRZEDMIOTU      | TREŚCI PROGRAMOWE    | NARZĘDZIA DYDAKTYCZNE | SPOSOBY OCENY |
|-------------------|--------------------------------------------------------------------------------|----------------------|----------------------|-----------------------|---------------|
| EK1               | K_W11 K_K01                                                                    | Cel 1 Cel 2<br>Cel 3 | k1 k2 k3 k4 k5<br>k6 | N1 N2 N3 N4           | F1 F2 P1      |
| EK2               | K_U15 K_K02<br>K_K03                                                           | Cel 1 Cel 2<br>Cel 3 | k1 k2 k3 k4 k5<br>k6 | N1 N2 N3 N4           | F1 F2 P1      |
| EK3               | K_W11 K_U15                                                                    | Cel 1 Cel 2<br>Cel 3 | k1 k2 k3 k4 k5<br>k6 | N1 N2 N3 N4           | F1 F2 P1      |
| EK4               | K_K01 K_K03                                                                    | Cel 1 Cel 2<br>Cel 3 | k1 k2 k3 k4 k5<br>k6 | N1 N2 N3 N4           | F1 F2 P1      |

## 11 WYKAZ LITERATURY

### LITERATURA PODSTAWOWA

- [1 ] **Cooke B., Williams P.** — *Construction planning, programming and control.*, Singapore, 2009, Wiley-Blackwell
- [2 ] **Hendrickson C., Au T.** — *Project Management for Construction*, International Series, 1989, Prentice Hall

### LITERATURA DODATKOWA

- [1 ] Manuals for computer applications

## 12 INFORMACJE O NAUCZYCIELACH AKADEMICKICH

### OSOBA ODPOWIEDZIALNA ZA KARTĘ

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

### OSOBY PROWADZĄCE PRZEDMIOT

1 dr inż. Michał Juszczyk (kontakt: [mjuszczuk@izwbit.pk.edu.pl](mailto:mjuszczuk@izwbit.pk.edu.pl))

2 dr inż. Renata Kozik (kontakt: [rkozik@izwbit.pk.edu.pl](mailto:rkozik@izwbit.pk.edu.pl))

## 13 ZATWIERDZENIE KARTY PRZEDMIOTU DO REALIZACJI

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(miejscowość, data)

(odpowiedzialny za przedmiot)

(dziekan)

**PRZYJMUJĘ DO REALIZACJI** (data i podpisy osób prowadzących przedmiot)

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