## Tadeusz Kosciuszko Cracow University of Technology

# **Course Card**

Faculty of Civil Engineering

Field of study: Civil Engineering Study profile: general academic

Study form: full-time Field of study code: BUD

Study cycle: 1st

Specialty: no specialty

#### 1 COURSE INFORMATION

| Course name               | Wprowadzenie do ekonomiki budownictwa          |
|---------------------------|--|
| Course name in<br>English | Introduction to Economics in Civil Engineering |
| Course code               | WIL BUD oIS D50 24/25                          |
| Course category           | Przedmioty profilowe                           |
| No. of ECTS points        | 2.00   |
| Semester                  | 7  |

# 2 CLASS TYPE, NUMBER OF HOURS ACCORDING TO THE STUDY PLAN

| Semester | Lecture | Class<br>exercise | Laboratory | Computer<br>lab | Design<br>exercise | Seminar |
|----------|---------|-------------------|------------|-----------------|--------------------|---------|
| 7        | 7       | 0                 | 0          | 8               | 7                  | 0       |

## 3 COURSE OBJECTIVES

Objective 1 To familiarize students with the basics of assessment of the construction projects' profitability.

Objective 2 To prepare students to conduct research involving assessment of the construction projects' profitability.

# 4 PREREQUISITES IN TERMS OF KNOWLEDGE, SKILLS AND OTHER COMPETENCES

#### **5 LEARNING OUTCOMES**

- LO1 Knowledge A student knows the concept of the time value of money.
- LO2 Skills A student knows basic measures of construction projects' profitability.
- **LO3 Knowledge** A student can calculate the future value, the present value, the periodic payment equivalent to the future value and the periodic payment equivalent to the present value using the formulas and financial functions of MS Excel.
- **LO4 Skills** A student can calculate the basic measures of construction projects' profitability using the formulas and financial functions of MS Excel.
- **LO5 Knowledge** A student honestly interprets the results of his work and assesses the construction projects' profitability.

#### **6 COURSE CONTENT**

|     | Design exercise  |                          |
|-----|--|--------------------------|
| No. | Subject matter of the course Detailed description of thematic blocks | No. of<br>class<br>hours |
| P1  | Profitability assessment of an example construction project.         | 7                        |

|     | Lecture   |                          |
|-----|---|--------------------------|
| No. | Subject matter of the course<br>Detailed description of thematic blocks | No. of<br>class<br>hours |
| L1  | Time value of money.  | 3                        |
| L2  | Basic measures of construction projects' profitability                  | 4                        |

|     | Laboratory computer   |                          |
|-----|---|--------------------------|
| No. | Subject matter of the course Detailed description of thematic blocks  | No. of<br>class<br>hours |
| K1  | Calculating the future value, the present value, the periodic payment equivalent to the future value and the periodic payment equivalent to the present value using the formulas and financial functions of MS Excel. | 2                        |
| K2  | Calculating the basic measures of construction projects' profitability using the formulas and financial functions of MS Excel.  | 3                        |
| К3  | Comparison of the profitability of construction projects based on basic measures.   | 3                        |

### **TEACHING TOOLS**

- **N1** Lectures
- N2 Multimedia presentations
- N3 Laboratory exercises
- N4 Design exercises
- N5 Consultations

### 7 Student workload

| Activity form  | Number of hours of activity |  |  |
|--|-----------------------------|--|--|
| Hours realized in contact with the teacher               |                             |  |  |
| Hours resulting from the study plan                      | 22                          |  |  |
| Consultation hours                                       | 1                           |  |  |
| Exams and tests during session                           | 1                           |  |  |
| Hours of autonomous student work                         |                             |  |  |
| Preparing for classes, studying literature               | 12                          |  |  |
| Developing results                                       | 12                          |  |  |
| Preparing of reports, projects presentations, discussion | 12                          |  |  |
| Total number of hours devoted to the subject             | 60                          |  |  |
| Total number of ECTS points                              | 2.00                        |  |  |

## 8 Methods of grading

#### Partial grades

- F1 Individual project
- F2 Test computer laboratories
- F3 Test lecture

#### Summary grade

**P1** Weighted average of formative grades (weights: 0.4 for lecture grade, 0.3 for project grade and 0.3 for computer laboratory grade)

| Conditions for passing the course                                   |
|---|
| L1 Passing the calculation tasks and test at computer laboratories. |
| L2 Passing the project.   |
| L3 Passing the lecture test.  |
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