COURSE DESCRIPTION CARD - SYLLABUS

Course name
BIM in Environmental Engineering [S1IŚrod2>BIM]

Course

Field of study
Environmental Engineering

Year/Semester
3/6

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
15

Other
0

Tutorials
0

Projects/seminars
0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

1. Knowledge: Knowledge aquired from subject Technical drawing and CAD. 2. Skills: Skills aquired from subject Technical drawing and CAD. 3. Social competencies: Awareness of need to constantly update and supplement knowledge and skills.

Course objective

Aquire of basic knowledge and skills in the field of BIM (Building Information Modeling).

Course-related learning outcomes

Knowledge:
1. Student knows basis of BIM, knows what for it serves, understands the differences between CAD and BIM.
2. Student has knowledge of using BIM in chain - project, construction management, building management.
3. Student knows basic capabilities of BIM software, has knowledge of the information that is stored in model.

Skills:
1. Student can operate in three-dimensional space of computer object.
2. Student can prepare a simple model in BIM environment.
3. Student can retrieve information from BIM model.

Social competences:
1. Student understands the need for teamwork in solving theoretical and practical problems.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lectures
Written final multianswer test (effects W1 to W3). Mark scale (percentage / mark): 0-50 ndst, 51-60 dst, 61-70 dst+, 71-80 db, 81-90 db+, 91-100 bdb
Laboratory (effects U1 do U3 oraz K1). Tasks prepared by individual students will be assesed.
Mark scale (percentage / mark): 0-50 ndst, 51-60 dst, 61-70 dst+, 71-80 db, 81-90 db+, 91-100 bdb

Programme content

Introduction to BIM, basic terminology, BIM versus CAD. BIM models and its features. BIM software overview. Interoperability of BIM models. Rules for creating BIM object model. Objects, objects families, objects classification, relations, parameters. Modifying object features.

Course topics

none

Teaching methods

2
Lectures (conversatory and problem elements of lectures) using multimedia presentation.
Laboratory clases.

Bibliography

Basic:
Kasznia D., BIM w praktyce. Standardy. Wdrożenia. Case Study, Wydawnictwo Naukowe PWN, Warszawa 2017

Additional:
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Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00