COURSE DESCRIPTION CARD - SYLLABUS

Course name
Computer programming 1 [S1IZarz1E>PROG1]

Course

Field of study
Engineering Management

Year/Semester
1/2

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
english

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
30

Other (e.g. online)
0

Tutorials
0

Projects/seminars
0

Number of credit points

3,00

Coordinators

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Lecturers

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Prerequisites

Basic knowledge of any programming language.

Course objective

Strengthening basic programming skills based on the C # language.

Course-related learning outcomes

Knowledge:
The student describes object-oriented programming language, its properties, and applications [P6S_WG_08].
The student defines event handling procedures in the context of programming [P6S_WG_08].
The student names functions, control statements, operators, and selected data types used in programming [P6S_WG_08].

Skills:
The student plans and conducts experiments, including measurements and computer simulations, to test programs [P6S_UW_09].
The student performs interpretation of experiment results and draws conclusions from the conducted measurements and computer simulations [P6S_UW_09].
The student prepares and creates functions and control instructions in programs [P6S_UO_01].
The student utilizes declarations, operators, and selected data types in programs [P6S_UW_09, P6S_UO_01].

Social competences:
The student recognizes cause-and-effect relationships in achieving programming goals and prioritizes the importance of alternative tasks in the process of program creation [P6S_KK_02].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The lecture grade is based on the percentage of the colloquium. Questions and tasks checking understanding of the issues. Passing threshold - 50%.
The grade from the laboratory is given as an average of the grades of individual tasks performed during classes. The assessment takes into account the correctness and completeness of the results obtained.

Programme content

Object-oriented programming language, object properties, event handling procedures, use and creation of functions, control instructions and use of declarations, operators and selected data types.

Teaching methods

Lectures: informative lecture, problem lecture, seminar lecture, case method.
Laboratories: laboratory (experiment) method, workshop method.

Bibliography

Basic:
Michaelis M., C# 7.0. Kompletny przewodnik dla praktyków. Wydanie VI, Helion 2019
Lis M., C#. Praktyczny kurs. Wydanie III, Helion 2016

Additional:
Jamro M., Struktury danych i algorytmy w języku C#. Projektowanie efektywnych aplikacji, Helion 2019

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,00