STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Computer Science		**1011104411011100390**
Field of study	Profile of study (general academic, practical)	Year /Semester
Logistics - Part-time studies - First-cycle	**general academic**	**1 / 1**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
-	**Polish**	**obligatory**
Cycle of study:	Form of study (full-time,part-time)	
First-cycle studies	**part-time**	
No. of hours		No. of credits
Lecture: **-** Classes: **-** Laboratory: **14** Project/seminars: **-**		**2**
Status of the course in the study program (Basic, major, other)	(university-wide, from another field)	
other	**university-wide**	
Education areas and fields of science and art		ECTS distribution (number and %**)**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge of secondary school.
2	**Skills**	Basic computer literacy.
3	**Social competencies**	Able to work in computer laboratory group.

Assumptions and objectives of the course:

-Students should be made familiar with algorithmic thinking, the ways algorithms are developed and coded in programming languages. They should be able to design and implement simple algorithms in modern development environment. They should be provided with the introduction to computer science disciplines the most relevant to further study of logistics.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. Student is able to explain what is an algorithm and how it is converted into a computer program. - [(T1A_W02) K1A_W09]
2. Has a preliminary knowledge of Windows forms GUI interface. - [(T1A_W02) K1A_W10]
3. Is able to characterize shortly parts of computer science important for logistics and operations research. - [(InzA_W05) KInzA_W05]

Skills:

1. Is able to design and analize flowcharts of algorithms and explain how they work. - [T1A_U05 K1A_U05]
2. Is able to generate in Visual Basic a graphical user interface for simple application, and to program simple engineering task. - [(T1A_W02) K1A_W10]
3. Is able to define decision makimng problem in the way appropriate for further computerized solution. - [(T1A_U09) K1A_U09 i (T1A_U14) K1A_U14]

Social competencies:

1. Is aware of computer data security and the interests and rights of their users. - [(T1A_KO2) K1A_K02]

Assessment methods of study outcomes

-Practical programming tests in laboratories.

Formative assessment:

a) in the field of laboratory classes: implementation of exercises, practical test on a komputer.

Summary:

a) in the field of laboratory classes: the total score of the exercises and the result of the test.

Course description

Laboratories:

Graphical user interface objects.Event-driven applications. Introduction to object-oriented programming with the help of tools for rapid application generation (Visual Studio).

Didactic methods:

-Work with a book.

-Demonstration method.

-Laboratory method.

Basic bibliography:

1. Jurga A., Sławińska M., Wybrane aspekty projektowania systemów informacyjnych wspomagających procesy logistyczne, [w:] Gospodarka Magazynowa i Logistyka, 2011.

2. Stallings W., Organizacja i architektura systemu komputerowego, WNT, Warszawa, 2000.

3. Harel D., Rzecz o istocie informatyki. Algorytmika, WNT, Warszawa, 2000.

4. Reichel W., Visual Basic dla studentów : podstawy programowania w Visual Basic 2010, Witkom (Salma Press), Warszawa 2011.

5. Jan Bielecki J.,.Visual Basic do Windows : programowanie zdarzeniowe, Wyd. PLJ, Warszawa 1991.

Additional bibliography:

1. Samolej S. i inni, Wprowadzenie do informatyki : skrypt dla studentów kierunków nieinformatycznych na uczelniach technicznych. 1, Architektura komputerów, algorytmika, paradygmaty i języki programowania, Oficyna Wydawnicza Politechniki Rzeszowskiej, Rzeszów, 2014.

2. Avery J., [tł. Garbacz B, Kaczmarek D.], 100 sposobów na Visual Studio, Helion, Gliwice, 2005

Result of average student's workload

Activity	Time (working hours)
1. Attendance and active participation in laboratory exercises	14
2. Preparation for the final credits	14

Student's workload

Source of workload	hours	ECTS
Total workload	28	2
Contact hours	14	1
Practical activities	14	1