

SYLLABUS OF A MODULE

Polish name of a module	Zaawansowane programowanie obiektowe
English name of a module	Advanced object programming
ISCED classification	0613
Field of study	<i>Computer science</i>
Languages of instruction	<i>English</i>
Level of qualification	<i>first degree</i>
Form of study	<i>full-time</i>
Number of ECTS credit points	4

Number of hours per semester:

Lecture	Tutorial	Laboratory	Seminar	Project	Others
30	0	30	0	0	0

MODULE DESCRIPTION

Module objectives

- C1. a student acquires the advanced object programming knowledge of modern C++
- C2. a student acquires the advanced object programming skills of modern C++
- C3. a student acquires social competence

PRELIMINARY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. intermediate English language skills
2. C++ intermediate object programming skills
3. programming skills using Linux

LEARNING OUTCOMES

- EU1. a student acquired the advanced object programming knowledge of modern C++
- EU2. a student acquired the advanced object programming skills of modern C++
- EU3. a student acquired social competence

MODULE CONTENT

Type of classes – lectures	Number of hours
W1: memory model, expression value categories, references	10
W2: move semantics, lambda expressions, containers	10
W3: smart pointers	10
Type of classes– laboratory	Number of hours
L1: memory model, expression value categories, references	10
L2: move semantics, lambda expressions, containers	10
L3: smart pointers	10

TEACHING TOOLS

1. lecture
2. lab class
3. test

WAYS OF ASSESSMENT (F – FORMATIVE, S – SUMMATIVE

F1. involvement in lab classes
P1. test

STUDENT'S WORKLOAD

#	Forms of activity	Average number of hours required for realization of activity
1. Contact hours with teacher		
1.1	Lectures	30
1.2	Tutorials	0
1.3	Laboratory	30
1.4	Seminar	0
1.5	Project	0
1.6	Consulting teacher during their duty hours	3
1.7	Examination	0
Total number of contact hours with teacher:		63
2. Student's individual work		
2.1	Preparation for tutorials and tests	0
2.2	Prreparation for laboratory exercises, writing reports on laboratories	15
2.3	Preparation of project	0
2.4	Preparation for final lecture assessment	22
2.5	Preparation for examination	0
2.6	Individual study of literature	0
Total number of hours of student's individual work:		37
Overall student's workload:		100
Overall number of ECTS credits for the module		4
Number of ECTS points that student receives in classes requiring teacher's		2,4

supervision:	
Number of ECTS credits acquired during practical classes including laboratory exercises and projects :	2

BASIC AND SUPPLEMENTARY RESOURCE MATERIALS

1. Bjarne Stroustrup, The C++ Programming Language, Addison-Wesley, 2013
2. Scott Meyers, Effective Modern C++, O'Reilly, 2014

MODULE COORDINATOR (NAME, SURNAME, INSTITUTE, E-MAIL ADDRESS)

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