SYLLABUS OF A MODULE

Polish name of a module	**Programowanie uogólnione**
English name of a module	**Generic programming**
ISCED classification - Code	0613
ISCED classification - Field of study	*Software and applications development and analysis*
Languages of instruction	*English*
Level of qualification	*2 - MSc (EQF 7)*
Number of ECTS credit points	*6*
Examination	*EW- exam written*
Available in semester	*A – Autumn only*

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 generic programming knowledge
C2. a student acquires the generic programming skills
C3. a student acquires social competence

PRELIMINARY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

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

LEARNING OUTCOMES

EU1. a student acquired the generic programming knowledge
EU2. a student acquired the generic programming skills
EU3. a student acquired social competence

MODULE CONTENT

Type of classes – lectures	Number of hours
W1: templates (kinds of templates and parameters, template specialization, template argument deduction, variadic templates)	10
W2: supporting mechanisms (auto type, function overloading, perfect argument forwarding, generic call expression)	10
W3: type traits, constraint, concept, order relations, algorithm lifting	10
Type of classes– laboratory	Number of hours
L1: templates (kinds of templates and parameters, template specialization, template argument deduction, variadic templates)	10
L2: supporting mechanisms (auto type, function overloading, perfect argument forwarding, generic call expression)	10
L3: type traits, constraint, concept, order relations, algorithm lifting	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	Examination	0
	Total number of contact hours with teacher:	60
2.	**Student's individual work**	
2.1	Preparation for tutorials and tests	0
2.2	Prreparation for laboratory exercises, writing reports on laboratories	30
2.3	Preparation of project	0
2.4	Preparation for final lecture assessment	30
2.5	Preparation for examination	0
2.6	Individual study of literature	30
	Total numer of hours of student's individual work:	90

Overall student's workload:	150
Overall number of ECTS credits for the module	**6**
Number of ECTS points that student receives in classes requiring teacher's supervision:	2,44
Number of **ECTS** credits acquired during practical classes including laboratory exercises and projects :	2,2

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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