



MODULE DESCRIPTION

Module code	
Module name	Systemy Multimedialne
Module name in English	Multimedia Systems
Valid from academic year	2012/2013

MODULE PLACEMENT IN THE SYLLABUS

Subject	Computer Science
Level of education	1st degree <i>(1st degree / 2nd degree)</i>
Studies profile	General <i>(general / practical)</i>
Form and method of conducting classes	Full-time <i>(full-time / part-time)</i>
Specialisation	Information Systems
Unit conducting the module	The Department of Computer Science
Module co-ordinator	Arkadiusz Chrobot, PhD, Eng.
Approved by:	

MODULE OVERVIEW

Type of subject/group of subjects	Major <i>(basic / major / specialist subject / conjoint / other HES)</i>
Module status	Non-compulsory <i>(compulsory / non-compulsory)</i>
Language of conducting classes	Polish
Module placement in the syllabus - semester	6th semester
Subject realisation in the academic year	Summer semester <i>(winter / summer)</i>
Initial requirements	No requirements <i>(module codes / module names)</i>
Examination	No <i>(yes / no)</i>
Number of ECTS credit points	4

Method of conducting classes	Lecture	Classes	Laboratory	Project	Other
Per semester	30		30		

TEACHING RESULTS AND THE METHODS OF ASSESSING TEACHING RESULTS



Projekt współfinansowany ze środków Unii Europejskiej w ramach Europejskiego Funduszu Społecznego

Module target	The aim of the module is to acquaint student with the techniques and algorithms used in image and sound processing, image, sound, and video sequence compression as well as with the elements of Computer Vision.
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Effect symbol	Teaching results	Teaching methods (l/c/l/p/other)	Reference to subject effects	Reference to effects of a field of study
W_01	A student is familiar with the specificity of designing multimedia applications for mobile devices.		KW_12	T1A_W04 T1A_W07
W_02	A student knows the algorithms concerning sound processing (filtering and the applications of FFT).		K_W12	T1A_W04 T1A_W07
W_03	A student is acquainted with basic algorithms concerning image processing (filtering, scaling, and transformations); a student also knows how to apply them in practice.		K_W12	T1A_W04 T1A_W07
W_04	A student knows the algorithms of image, sound as well as video sequence compression.		K_W12	T1A_W04 T1A_W07
U_01	A student is able to design and create a multimedia application for mobile devices.		K_U18	T1A_U07 T1A_U15 T1A_U16
U_02	A student can use ready-made tool programs for image, sound, and video sequence processing.		K_U18	T1A_U07 T1A_U15 T1A_U16

Teaching contents:

Teaching contents as regards lectures

Lecture number	Teaching contents	Reference to teaching results for a module
1-2	Programming with the use of Java ME platform.	W_01
3-6	Programming for the Android platform.	W_01
7-9	The basics of image processing.	W_03
10-11	Digital representation of sound, sound processing.	W_02
12-13	The methods of sound compression (mp3, ogg).	W_02
14-15	Video sequence, compression methods.	W_04

Teaching contents as regards laboratory classes

Laboratory class number	Teaching contents	Reference to teaching results for a module
1-2.	Programming with the use of Java ME platform.	U_01
3-7.	Programming for the Android platform.	U_01
8-10.	The basics of image processing.	U_02
11-12.	Sound, the methods of sound compressing.	U_02
13-15.	Image and video sequence compression.	U_02

The methods of assessing teaching results



Effect symbol	Methods of assessing teaching results <i>(assessment method, including skills – reference to a particular project, laboratory assignments, etc.)</i>
W_01	A written test.
W_02	A written test.
W_03	A written test.
U_01	Laboratory class assignments.
U_02	Laboratory class assignments.

STUDENT'S INPUT

ECTS credit points		
	Type of student's activity	Student's workload
1	Participation in lectures	30
2	Participation in classes	
3	Participation in laboratories	30
4	Participation in tutorials (2-3 times per semester)	2
5	Participation in project classes	
6	Project tutorials	
7	Participation in an examination	
8		
9	Number of hours requiring a lecturer's assistance	62 <i>(sum)</i>
10	Number of ECTS credit points which are allocated for assisted work <i>(1 ECTS credit point=25-30 hours)</i>	3
11	Unassisted study of lecture subjects	15
12	Unassisted preparation for classes	
13	Unassisted preparation for tests	10
14	Unassisted preparation for laboratories	15
15	Preparing reports	10
16	Preparing for a final laboratory test	
17	Preparing a project or documentation	
18	Preparing for an examination	
19	Preparing questionnaires	
20	Number of hours of a student's unassisted work	50 <i>(sum)</i>
21	Number of ECTS credit points which a student receives for unassisted work <i>(1 ECTS credit point=25-30 hours)</i>	2
22	Total number of hours of a student's work	
23	ECTS credit points per module <i>1 ECTS credit point=25-30 hours</i>	5
24	Work input connected with practical classes <i>Total number of hours connected with practical classes</i>	55
25	Number of ECTS credit points which a student receives for practical classes <i>(1 ECTS credit point=25-30 hours)</i>	3