1.	Field of study	Computer Science
2.	Academic year of entry	2016/2017 (summer term)
3.	Level of qualifications/degree	second-cycle studies
4.	Degree profile	general academic
5.	Mode of study	full-time

Module: Haskell Programming Language

Module code: 08-IN-S2-JP-H

1. Number of the ECTS credits: 3

2. Learning outcomes of the module

code	description	learning outcomes of the programme	level of competence (scale 1-5)
JP-H -U_5	Can implement numeric algorithms using Haskell language.	K_2_A_I_U13 K_2_A_I_U14 K_2_A_I_U15	1 1 1
JP-H -U_6	Can practically realize parsing analysis and the structured text processing.	K_2_A_I_U13	1
JP-H -U_7	Can implement chosen algorithms of discreet mathematics with use of Haskell.	K_2_A_I_U13 K_2_A_I_U14 K_2_A_I_U15	1 1 1
JP-H -U_8	Can compile programs written in Haskell and work in interactive environment.	K_2_A_I_U13 K_2_A_I_U14 K_2_A_I_U15	1 1 1
JP-H -W_1	Has knowledge in the field of working principles for Glasgow Haskell Compiler software and can characterize basic types and type classes in Haskell.	K_2_A_I_W10	2
JP-H -W_2	Has knowledge in the field of standard functions in Haskell and can characterize expedience of their use.	K_2_A_I_W10	1
JP-H -W_3	Has knowledge in the field of defining own functions, including recursive functions and higher order functions.	K_2_A_I_W09 K_2_A_I_W10	1 1
JP-H -W_4	Has knowledge in the field of parsing realization and declaring own data types.	K_2_A_I_W09 K_2_A_I_W10	1 1

3. Module description

Description	Aim of classes in this module is preparing the students to solve numerical tasks, tasks of discreet mathematics and also to process texts with use of Haskell language. As a result, the student should exhibit complete understanding of mathematics connected with developing and encoding algorithms in a functional language. The consequence should be deepening knowledge in the field of programming methodologies and developing the skill of algorithms implementation so as they work infallibly, fast and could be easily analyzed and expanded.
Prerequisites	

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
JP-H -w_1	Lecture credit	Solving tasks of content, one after each of the sections discussed during lecture.	JP-H -W_1, JP-H -W_2, JP-H -W_3, JP-H -W_4
JP-H -w_2	Laboratory class credit	Tests after each topic completed during classes together with theoretical knowledge of lecture subject matter control.	JP-H -U_5, JP-H -U_6, JP-H -U_7, JP-H -U_8

5. Forms of teaching

code	form of teaching			required hours of student's own work		assessment of the learning outcomes of the module
	type	description (including teaching methods)	number of hours	description	number of hours	
JP-H -fs_1	lecture	Presenting educational content in verbal form, with use of content visualization. Focusing on conceptually complex material and indicating website addresses.	15	Presenting educational content in verbal form, with use of content visualization. Focusing on conceptually complex material and indicating website addresses.	10	JP-H -w_1
JP-H -fs_2	laboratory classes	Detailed preparation of the students to solve tasks, indication of proceedings methodology, sequence of proceedings. Solving tasks of content.	30	Solving tasks of subsequent topics (mainly connected with implementation) together with analysis of the already existing solutions in the script and on websites.	35	JP-H -w_2