

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: Decision support systems

Module code: 08-IN-ISI-S2-SWD

1. Number of the ECTS credits: 4

2. Learning outcomes of the module			
code	description	learning outcomes of the programme	level of competence (scale 1-5)
SWD -U _7	Can construct decision support systems on the Genie platform basing on the Bayes simple and dynamic networks, can implement a decision support system in Java language, using SMILE library.	K_2_A_I_U13 K_2_A_I_U17 K_2_A_I_U18	1 2 1
SWD -U _8	Can construct complex decision support systems realized with use of KNIME package, including time series prediction.	K_2_A_I_U13 K_2_A_I_U17 K_2_A_I_U18	1 2 1
SWD -W _2	Possesses basic knowledge in the field of utility theory, use of deterministic criteria (by Hurwicz, Laplace) and non-deterministic ones (e.g. maximum of expected utility) in decision support systems.	K_2_A_I_W18	1
SWD -W _3	Has basic knowledge in the field of Bayes networks and their use in decision support systems.	K_2_A_I_W08 K_2_A_I_W18	1 2
SWD -W _4	Has basic knowledge in the field of decision rules and their use in decision support systems.	K_2_A_I_W18	1
SWD -W _5	Possesses basic knowledge in the field of sequence patterns and their use in decision support systems.	K_2_A_I_W18	1
SWD -W _6	Possesses basic knowledge in the field of time series prediction as an element of a decision support system.	K_2_A_I_W18	1
SWD -W _1	Possesses basic knowledge in the field of decision support systems	K_2_A_I_W18	1

3. Module description

Description	Aim of classes in this module is preparing the students to design and realize decision support systems basing on Bayes networks and other methods of knowledge representation.
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Prerequisites	
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4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
SWD_w_1	Credit	Solving three theoretical tasks, also with computable character.	SWD -W_2, SWD -W_3, SWD -W_4, SWD -W_5, SWD -W_6, SWD -W_1
SWD_w_2	Presentation of independently implemented decision support system	Effecting a decision support system using the chosen platform:1)Genie+Java+SMILE 2)Java +R 3) KNIME	SWD -U_7, SWD -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	
SWD_fs_1	lecture	Presenting educational content in verbal form with use of content visualization. Focusing on conceptually complex material.	30	Familiarizing with lecture thematic.	10	SWD_w_1
SWD_fs_2	laboratory classes	Realization of project tasks using software packages Genie, KNIME	30	Analysis of the existing decision support systems. Implementation of the decision support system.	50	SWD_w_2