1.	Field of study	Computer Science
2.	Academic year of entry	2017/2018 (summer term), 2018/2019 (summer term)
3.	Level of qualifications/degree	second-cycle studies
4.	Degree profile	general academic
5.	Mode of study	full-time

Module: Web applications

Module code: 08-IN-IIN-S2-AI

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)
AI -K_12	Can work independently planning execution of the given tasks.	K_2_A_I_K01	1
		K_2_A_I_K02	1
AI -K_13	Can work in a team, appropriately planning and dividing parts of given tasks.	K_2_A_I_K03	1
AI -U_10	Use MVC (Model-Viewer-Controller) solution in database projects created in the chosen technology (Java or PHP or ASP .NET)	K_2_A_I_U15	1
		K_2_A_I_U16	3
AI -U_11	Uses technical documentation from various sources to solve problems during execution of given tasks.	K_2_A_I_U01	1
		K_2_A_I_U05	1
AI -U_6	Uses programming environments to create Internet projects, create applications divided into packets/modules, uses commentaries.	K_2_A_I_U14	1
		K_2_A_I_U16	3
		K_2_A_I_U20	1
		K_2_A_I_U21	1
AI -U_7	Creates controllers (objects of demands services), services demands basing on Get and Post,implements network application at application server and configures server at basic level.	K_2_A_I_U19	1
AI -U_8	Creates network applications basing on the chosen technology (Java or PHP or ASP .NET), uses component libraries, uses cookies and session mechanisms.	K_2_A_I_U16	3
		K_2_A_I_U20	1
AI -U_9	Uses libraries/communication modules with data base to implement layers of data, designs and manages the base connection from the Java application and application server level.	K_2_A_I_U18	1
		K_2_A_I_U22	3

AI -W_1	Characterizes application solutions in client-server architecture, especially the Internet ones, enumerates the most important elements of the multilayer structure in applications of this type.i	K_2_A_I_W10	1
		K_2_A_I_W16	1
AI -W_2	Defines the notion of network application and application server, characterizes application requirements towards implementation on servers based on different technologies.	K_2_A_I_W04	1
		K_2_A_I_W13	1
		K_2_A_I_W20	1
AI -W_3	Differentiates and describes elements of Internet technologies on the chosen platform (Java or PHP or ASP .NET)	K_2_A_I_W12	1
AI -W_4	Characterizes principles of connecting and use of relational databases servers in Internet technologies.	K_2_A_I_W13	1
		K_2_A_I_W18	1
AI -W_5	Describes MVC (Model-Viewer-Controller) application structure – especially in context of creating database Internet applications	K_2_A_I_W12	1
		K_2_A_I_W13	1
		K_2_A_I_W20	1

3. Module description

| Description | Aim of the class is practical exercising of creating Internet applications in the chosen technology (PHP or Java or ASP .NET). Through practical laboratory class and project realization, the students acquire knowledge, skills and competences connected with the subject thematic. After the classes are completed, the students should be able to design an Internet database application, implement it and deploy on the server of network applications. |
| Prerequisites | |

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
AI _w_1	Credit	Answers on several questions chosen from thematic group, covering all the sections discussed during classes.	AI -W_1, AI -W_2, AI -W_3, AI -W_4, AI -W_5
AI _w_2	Thematic task	Realization of thematic tasks during laboratory classes.	AI -U_10, AI -U_11, AI -U_6, AI -U_7, AI -U_8, AI -U_9
AI _w_3	Project task	Evaluation of project execution.	AI -K_12, AI -K_13, AI -U_10, AI -U_11, AI -U_6, AI -U_7, AI -U_8, AI -U_9

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	
AI _fs_1	lecture	Verbal presentation of theoretical module contents with support of multimedia and Internet accessible materials.	10	Studying lecture contents basing on books and Internet materials.	20	AI _w_1, AI _w_2
AI _fs_2	laboratory classes	Introduction to practical aspects of the module field. Explaining problems. Supporting the students in task realization. Discussing project contents and support during their execution.	20	Solving practical tasks distributed by the teacher. Executing the given project with use of the distributed sources of documentation and laboratory examples.	40	AI _w_2, AI _w_3