STUDY MODULE DESCRIPTION FORM						
Name of the module/subject Collective project		Code 1010331561010330098				
Field of study		Profile of study	practical)	Year /Semester		
Information Engineering		(brak)		3/6		
Elective path/specialty Information Technologies		Subject offered in: Polis	h	Course (compulsory, elective) obligatory		
Cycle of study:		Form of study (full-time,part-time)				
First-cycle studies		full-time				
No. of hours				No. of credits		
Lecture: - Classe	es: - Laboratory: 30	Project/seminars	s: 30	5		
Status of the course in the study program (Basic, major, other) (university-wide, from a (hrak)			another field	ak)		
Education areas and fields of science and art				ECTS distribution (number and %)		
technical sciences				5 100%		
dr Jerzy Bartoszek email: jerzy.bartoszek@put.poznan.pl tel. 61 665-3713, 61 665-2378 Elektryczny ul. Piotrowo 3A, 60-965 Poznań Prerequisites in terms of knowledge, skills and social competencies:						
1 Knowledge	knows and understands to an ad their analysis, algorithm design computationally difficult problem [K1 W04 (P6S WG)]	dvanced extent knowledge in the field of basic algorithms and techniques, abstract data structures and their implementation, is				
2 Skills	is able to formulate requirements, develop an object model, design and evaluate a simple IT system, taking into account the implemented functions and connections between components and using appropriately selected methods and techniques [K1_U16 (P6S_UW)]					
³ Social competencies	is ready to critically evaluate his knowledge in the field of computer science and recognize the importance of knowledge in solving cognitive and practical problems in the area of computer science					
Assumptions and ob	jectives of the course:					
Theoretical and practical as	pects of the group work.					
Study outco	omes and reference to the	educational resu	Its for a	field of study		
Knowledge:				-		
1. knows and understands t	o a large extent typical IT engineer	ing technologies - [[K1	_W18 (P6S	_WG)]]		
Skills:						
1. can estimate the time needed for the implementation of the task ordered; develop and implement a work schedule that ensures deadlines; plan and organize work - individual and in a team - [[K1_U02 (P6S_UO)]]						
2. is able to develop documentation of the engineering task and prepare a discussion of the results of this task with the use of specialist terminology - [[K1_U03 (P6S_UK)]]						
3. can participate in the debate on engineering tasks in the field of computer science; present and evaluate different opinions and positions - [[K1_U04 (P6S_UK)]]						
Social competencies:						
1. is ready to responsibly pe adherence to these principle	erform professional roles, including es by others - [[K1_K04 (P6S-KR)]	adherence to the princ	ples of prot	fessional ethics and		

Assessment methods of study outcomes

Tests, exercises, projects and reports.

Course description

Laboratory and projects:

Basic aspects of the group work: communication, collaboration, coordination. Modeling of the group work. Groupware. Course update 2017: Various programming projects realized by groups of students.

Teaching methods:

laboratory - with multimedia presentation, additional topics included in Moodle course, used tools enable students to perform tasks at home

projects - group work, multimedia presentation, analysis/discussion

Basic bibliography:

1. depends on the project

2. http://www.scrumguides.org/docs/scrumguide/v1/scrum-guide-pl.pdf

3. https://trello.com

Additional bibliography:

1. depends on the project

2. agilemanifesto.org. Witryna Agile Manifesto. [Online]. http://agilemanifesto.org

Result of average student's workload

Activity	Time (working hours)					
1. Participation in labs.	30					
2. Participation in project labs.	30					
3. Project modeling and design	40					
4. Preparation of the report	10					
5. Consultations	15					
Student's workload						
Source of workload	hours	ECTS				
Total workload	125	5				
Contact hours	75	3				
Practical activities	125	5				