	STUDY MODU	LE DE	SCRIPTION FORM			
Name of the module/subject Collective project			Code 1010331461010330098			
Field of study			Profile of study (general academic, practical) Year /Semester		Year /Semester	
Information Eng	jineering		(brak)		3/6	
Elective path/specialty Information Technologies			Subject offered in:  polish		Course (compulsory, elective obligatory	
Cycle of study:		F	Form of study (full-time,part-time	e)		
First-cycle studies			full-time			
No. of hours					No. of credits	
Lecture: - C	lasses: - Laboratory:	2	Project/seminars:	2	5	
	e study program (Basic, major, other)		(university-wide, from another	er field)		
(brak)			(br	ak)		
Education areas and fields of science and art					ECTS distribution (number and %)	
technical scienc	es				5 100%	
Responsible for	subject / lecturer:	F	Responsible for subj	ect /	lecturer:	
dr Jerzy Bartoszek			dr inż. Tomasz Bilski			
email: jerzy.bartosz	zek@put.poznan.pl		email: tomasz.bilski@put.poznan.pl			
tel. 61 665 37 14			tel. 061 66 53 554			
Elektryczny ul. Piotrowo 3A, 60	065 Poznań		Wydział Elektryczny ul. Piotrowo 3A 60-965 Poznań			
	terms of knowledge, ski	lls and				
	Student has ordered and	l methodo	plogical founded knowledge	of so	ftware engineering	
1 Knowledg	Δ	Student has ordered and methodological founded knowledge of software engineering.  Student has also structured and theoretically founded knowledge about software design,				
	implementation of algorit	implementation of algorithms, programming paradigms and styles, methods of verifying the correctness of programs, formal languages??, compilers, platforms.				
2 <b>Skills</b>		Student is able to gain information from literature, databases and other sources, is able to integrate the information, interpret it, as well as draw conclusions and formulate and justify				
Social competen		Is aware of the importance of the accurate completion of the project, notational standards, respect for linguistic correctness and timely submissions.				
Assumptions an	d objectives of the cours	se:				
Theoretical and practi	cal aspects of the group work.					
Study o	outcomes and reference t	to the e	ducational results for	or a	field of study	
Knowledge:					<b>-</b>	
	typical computer engineering tech		[]( )(((0))			

#### Skills:

- 1. Student is able to work independently and in a team, is able to estimate the time needed for the commissioned tasks, able to develop and implement a schedule of work to ensure deadlines. - [K\_U02]
- 2. Student is able to develop documentation of the given task and prepare a text containing a discussion of the results of this task. - [K\_U03]
- 3. Student is able to prepare and present a short presentation on the results of an engineering task. [K\_U04]

#### Social competencies:

1. Student knows a sense of responsibility for their own work and a willingness to comply with the principles of teamwork in realizing the task. - [K\_K04]

Assessment methods of study outcomes				
Tests, exercises, projects and reports.				
Course description				

# Faculty of Electrical Engineering

Lectu	

Basic aspects of the group work: communication, collaboration, coordination. Modeling of the group work. Groupware. Laboratory and projects:

Various programming projects realized by groups of students.

## Basic bibliography:

1. depends on the project

## Additional bibliography:

1. depends on the project

#### 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