Faculty of Fundamental Problems of Technology
COURSE CARD

Name in polish	:	**Systemy Ad Hoc**
Name in english	:	**Ad Hoc Systems**
Field of study	:	Computer Science
Specialty (if applicable)	:	
Undergraduate degree and form of	:	masters, stationary
Type of course	:	optional
Course code	:	E2_W12
Group rate	:	Yes

	Lectures	Exercides	Laboratory	Project	Seminar
Number of classes held in schools (ZZU)	30	30			
The total number of hours of student workload (CNPS)	90	90			
Assesment	pass				
For a group of courses final course mark	X				
Number of ECTS credits	3	3			
including the number of points corresponding to the classes of practical (P)		3			
including the number of points corresponding occupations requiring direct contact (BK)	3	3			

PREREQUISITES FOR KNOWLEDGE, SKILLS AND OTHER POWERS

COURSE OBJECTIVES
C1
C2

COURSE LEARNING OUTCOMES		
The scope of the student's knowledge:		
W1		
W2		
W3		
W4		
W5		
The student skills:		
U1		
U2		
U3		
U4		
The student's social competence:		
K1		

COURSE CONTENT

Type of classes - lectures		
Wy1	Foundamentals of ad hoc wireless networks	2h
Wy2	Selected techniques for randomized computations	4h
Wy3	Broadcast	2h
Wy4	Convergecast	2h
Wy5	Lower bound for broadcast	2h
Wy6	Initalization for ad hoc wireless networks	2h
Wy7	Cardinality estimation in ad hoc wireless networks	2h
Wy8	Routing	2h
Wy9	Geometric routing	2h
Wy10	On Alarm and Alert in ad hoc wireless networks	2h
Wy11	Optimization of energy consumption for ad hoc wireless	2h
Wy12		2h
Wy13	Data agregation in ad hoc networks	2h
Wy14	Capacity of ad hoc wireless networks	2h

Type of classes - exercises		
Ćw1		6h
Ćw2		2h
Ćw3		2h
Ćw4		4h
Ćw5		2h
Ćw6		4h
Ćw7		2h
Ćw8		2h
Ćw9		2h
Ćw10		2h
Ćw11		2h

Applied learning tools

1. Traditional lecture

2. Multimedia lecture

3. Solving tasks and problems

4. Consultation

5. Self-study students

EVALUATION OF THE EFFECTS OF EDUCATION ACHIEVEMENTS

Value	Number of training effect	Way to evaluate the effect of educa-tion
F1	W1-W5, K1-K1	
F2	U1-U4, K1-K1	
P=%*F1+%*F2		

BASIC AND ADDITIONAL READING

1.

2.

3.

SUPERVISOR OF COURSE
dr Marcin Zawada

RELATIONSHIP MATRIX EFFECTS OF EDUCATION FOR THE COURSE
Ad Hoc Systems
WITH EFFECTS OF EDUCATION ON THE DIRECTION OF COMPUTER SCIENCE

Course training effect	Reference to the effect of the learning outcomes defined for the field of study and specialization (if applicable)	Objectives of the course**	The contents of the course**	Number of teaching tools**
W1	K2_W01 K2_W02	C1	Wy1-Wy14	1 2 4 5
W2	K2_W01 K2_W02	C1	Wy1-Wy14	1 2 4 5
W3	K2_W01 K2_W02	C1	Wy1-Wy14	1 2 4 5
W4	K2_W01 K2_W02	C1	Wy1-Wy14	1 2 4 5
W5	K2_W01 K2_W02	C1	Wy1-Wy14	1 2 4 5
U1	K2_U15	C2	Ćw1-Ćw11	3 4 5
U2	K2_U09	C2	Ćw1-Ćw11	3 4 5
U3	K2_U09 K2_U10	C2	Ćw1-Ćw11	3 4 5
U4	K2_U09	C2	Ćw1-Ćw11	3 4 5
K1	K2_K12 K2_K13	C1 C2	Wy1-Wy14 Ćw1-Ćw11	1 2 3 4 5