

KAZIMIERZ WIELKI UNIVERSITY

Major: **MATHEMATICS**
 Speciality: **Cryptology**
 Level of studies: **first level**
 System of studies: **stationary/nonstationary**

Study plan valid from academic year 2010/11

No.	Subject name	Number of ECTS credits	Institute carrying classes	Exam	Graded test	Test	Total No. Of hours	No. of hours of										Teaching hours												
								Lectures	Classes	Seminars	Laboratories	Diploma seminars	First year			Second year			Third year											
													I sem.	II sem.	III sem.	IV sem.	V sem.	VI sem.	I sem.	II sem.	III sem.	IV sem.	V sem.	VI sem.						
														Weeks in semester						Hours per week										
						15	15	15	15	15	15	L	oth	L	oth	L	oth	L	oth	L	oth	L	oth							
Total:		180		after semester			1845	870	60	660	195	60	8	12	9	10	10	13	8	12	11	9	13	8	20	19	23	20	20	21
BASIC SUBJECTS (MATHEMATICS)																														
1	Introduction to Mathematics	7	IM	I			60	30		30			2	2																
2	Linear Algebra and Geometry	20	IM	I,II			180	90		90			3	3	3	3														
3	Mathematical Analysis I	20	IM	I,II			180	90		90			3	3	3	3														
4	Basic Cryptology Technics	6	IM	II			45	30			15				2	1														
5	Algebra and Number Theory	14	IM	IV			120	60		60							2	2	2	2										
6	Mathematical Analysis II	6	IM	III			90	45		45							3	3												
7	Introduction to Topology	6	IM	IV			60	30		30							2	2												
8	Differential Equations I	4	IM	V			60	30		30										2	2									
9	Probability and Statistics	8	IM	VI			90	45		45															3	3				
10	Monographs lecture I	6	IM	VI			60	60												2	2									
11	Monographs lecture II	3	IM	V			30	30												2	2									
12	Diploma seminar	10	IM			V,VI	60				60										2	2			2	2				
Total:		110					1035	540	0	420	15	60	8	8	8	7	5	5	4	4	6	4	7	5						
SPECIALIZED SUBJECT (CRYPTOLOGY)																														
13	Elementary Number Theory	6	IM	III			60	30		30							2	2												
14	Introduction to Cryptology	6	WMFIT	III			60	30		30							2	2												
15	Algorithmic Number Theory	3	IM	IV			30	15		15									1	1										
16	Discrete Mathematics I	6	IM	IV			60	30		30									2	2										
17	Theory of Elliptic Curves	4	IM	V			30	15		15											1	1								
18	Basic Cryptographic Algorithms	4	WMFIT	V			45	15			30										1	2								
19	Object Oriented Programming	3	IM	V			30	15		15											2	2								
20	Operating Systems	3	IM	V			30	15		15																				
21	Computer Networks	3	IM	VI			30	15		15																				
22	Cryptographic Protocols	8	WMFIT	VI			75	30		45													2	3						
23	Course of Programming Languages I	3	IM		II		30	15		15			1	1																
24	Course of Programming Languages II	3	IM		IV		30	15		15							1		1	1										
25	Information Theory	2	WMFIT		III		15	15																						
Total:		54					525	255	0	120	150	0	0	0	1	1	5	4	4	4	4	5	2	3						
SUBJECTS OF GENERAL EDUCATION																														
26	Foreign Language Course	5	SJO		I,II,III,IV		120			120			2		2		2	2												
27	Philosophy	3	WH		VI		60	60																			4			
28	Intellectual Property Protection	1	WMFIT		V		15	15													1									
29	Physical Education	2	SWFIS			III,IV	60		60								2		2											
30	Information Technology	2	IM		I		30			30			2																	
Total:		13					285	75	60	120	30	0	0	4	0	2	0	4	0	4	1	0	4	0						
Vocational practice		3		OHS Training			4																							

No. of exams after semester

Obligatory:
 1) Diploma exam
 2) 3-weeks vocational practice after III semester (3 ECTS credits).

I	II	III	IV	V	VI
3	4	3	4	4	4

Distribution of ECTS credits					
First year		Second year		Third year	
I sem.	II sem.	III sem.	IV sem.	V sem.	VI sem.
Weeks in semester					
15	15	15	15	15	15
ECTS credits per semester					
30	30	29	31	30	30
7					
10	10				
10	10				
	6				
		7	7		
		6			
			6		
				4	
					8
				3	3
				5	5
27	26	13	13	15	16
		6			
		6			
			3		
			6		
				4	
				4	
				3	
				3	
					3
					8
	3				
			3		
		2			
0	3	14	12	14	11
1	1	1	2		
					3
				1	
		1	1		
2					
3	1	2	3	1	3
Vocational practice		3			

KAZIMIERZ WIELKI UNIVERSITY

Major: MATHEMATICS

Speciality: Informatics

Level of studies: first level

System of studies: stationary/nonstationary

Study plan valid from academic year 2010/11

No.	Subject name	Number of ECTS credits	Institute carrying classes	Exam	Graded test	Test	Total No. Of hours	No. of hours of						Teaching hours														
								Lectures	Classes	Seminars	Laboratories	Diploma seminars	First year		Second year		Third year											
													I sem.	II sem.	III sem.	IV sem.	V sem.	VI sem.										
													Weeks in semester															
L	oth	L	oth	L	oth	L	oth	L	oth	L	oth																	
Total:		180				after semester	1845	870	60	570	285	60	8	12	9	10	9	14	7	12	12	10	13	7				
													20	19	23	19	22	20										
BASIC SUBJECTS (MATHEMATICS)																												
1	Introduction to Mathematics	7	IM	I			60	30		30			2	2														
2	Linear Algebra and Geometry	20	IM	I,II			180	90		90			3	3	3	3												
3	Mathematical Analysis I	20	IM	I,II			180	90		90			3	3	3	3												
4	Basic Cryptology Technics	6	IM	II			45	30			15				2	1												
5	Algebra and Number Theory	14	IM	IV			120	60		60							2	2	2	2								
6	Mathematical Analysis II	6	IM	III			90	45		45							3	3										
7	Introduction to Topology	6	IM	IV			60	30		30									2	2								
8	Differential Equations I	4	IM	V			60	30		30											2	2						
9	Discrete Mathematics	6	IM	V			60	30		30											2	2						
10	Probability and Statistics	8	IM	VI			90	45		45														3	3			
11	Facultative lecture I	6	IM	VI			60	60													2	2						
12	Facultative lecture II	6	IM	VI			60	60													2	2						
13	Diploma seminar	10	IM			V,VI	60				60												2	2		2		
Total:		119					1125	600	0	450	15	60	8	8	8	7	5	5	4	4	8	6	7	5				
SPECIALIZED SUBJECT (INFORMATICS)																												
14	Computer architecture	3	IM		III		30	15		15							1	1										
15	Theoretical Base of Informatics Science	4	IM	III			30	15		15							1	1										
16	Course of Programming Languages I	3	IM		II		30	15		15						1	1											
17	Operating Systems	3	IM		III		30	15		15							1	1										
18	Course of Programming Languages II	4	IM		IV		30	15		15							1	1	1	1								
19	Algorithms and DataStructures	5	IM	III			45	15		30							1	2										
20	Computer Networks	3	IM		IV		30	15		15									1	1								
16	Administrator of a School Computer Lab or Administrator of Websites	3	IM		V		30	15		15											1	1						
17	Object-Oriented Programming	3	IM		IV		30	15		15									1	1								
18	Numerical Methods	6	IM	V			60	30		30											2	2						
19	Software engineering	2	IM		VI		15	15																1				
20	Databases	3	IM		VI		30	15		15													1	1				
21	Software Laboratory	3	IM		IV,VI		45			45									1	1		1	1		1			
Total:		45					435	195	0	0	240	0	0	0	1	1	4	5	3	4	3	4	2	2				
SUBJECTS OF GENERAL EDUCATION																												
22	Foreign Language Course	5	SJO		I,II,III,IV		120			120			2	2		2	2											
23	Philosophy	3	WH		VI		60	60																	4			
24	Intellectual Property Protection	1	WMFiT		V		15	15												1								
25	Physical Education	2	SWFiS		III,IV		60		60							2	2											
26	Information Technology	2	IM		I		30			30			2															
Total:		13					285	75	60	120	30	0	0	4	0	2	0	4	0	4	1	0	4	0				

Vocational practice 3

OHS Training 4

No. of exams after semester

Vocational practice 3

Obligatory:

1) Diploma exam

2) 3-weeks vocational practice after III semester (3 ECTS credits).

I	II	III	IV	V	VI
3	4	3	3	2	3

