

PLAN OF REGULAR STUDIES, GRADUATE PROGRAMME

faculty: PHYSICS, speciality: THEORETICAL PHYSICS

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REGULAR DAILY STUDIES – enrolment 2016/2017

Subject		Summary figures		Curriculum in respective semesters (hours per week)							
		Including:		I		II		III		IV	
		H	pt.	H	pt.	H	pt.	H	pt.	H	pt.
A. GENERAL SUBJECTS											
1	English					2	2				
2	Physical education*	30	2					2	1		
3	Selective subject*	30	2					2	2		
4	Selective subject in the field of humanities*	15	2			1	2				
5	Selective social science subject*	30	3					2	3		
B. BASIC SUBJECTS											
6	Physics laboratory II	105	12			7	12				
C. FIELD SUBJECTS											
7	Theoretical physics	60	10			4	5				
8	Theoretical physics	45				<u>3</u>	5				
9	Solid state physics	45						3	4		
10	Solid state physics	30	7					<u>2</u>	3		
11	Quantum physics I	45					3	4			
12	Quantum physics I	30	7				<u>2</u>	3			
13	Nuclear and high energy physics	30						2	3		
14	Nuclear and high energy physics	30						<u>2</u>	3		
15	Introduction to the physics of atoms and particles	30					2	3			
16	Introduction to the physics of atoms and particles	30					<u>2</u>	3			
D. SPECIALIZATION SUBJECTS*											
17	Mathematical methods in physics	30	6			2	4				
18	Mathematical methods in physics	15				<u>1</u>	2				
19	Packages for symbolic computations	30	3				2	3			
20	Computer simulations	30	7				2	4			
21	Computer simulations	30					<u>2</u>	3			
22	Statistical physics	30					2	3			
23	Statistical physics	15	5				1	2			
24	Quantum physics II	30	4					2	2		
25	Quantum physics II	15						<u>1</u>	2		
26	Field theory	30	4							2	2
27	Field theory	30								<u>2</u>	2
28	Elementary particle physics	30	2							2	2
ELECTIVE SUBJECTS**											
29	Graduate seminar I	30	3					2	3		
30	Graduate seminar II	30	4							2	4
31	General seminar	30	4							2	4
32	Monographic lecture I	30	4					<u>2</u>	4		
33	Monographic lecture II	30	4							<u>2</u>	4
34	MASTER'S THESIS		12								12
35	MAGISTER EXAMINATION									E	
Sum:		1080	120	19	30	19	30	22	30	12	30
NUMBER OF EXAMINATIONS				2E	3E			4E	2E+	E	

Legend: L - lecture, T - Tutorials, Lab - laboratory, Pr -practice, S – seminar

The lecture courses are closed with an **examination**

Tutorials, laboratories and seminars — **credit and mark**

Subjects:

General seminar, Graduate seminar I, II — credit and mark.

Lectures: Statistical physics, Elementary particle physics - credit and mark

Selective subject*: Variety in unity in biological sciences, University-wide elective courses or from another field of study (30 hours, 2 ECTS) - credit without grade. **Physical education - credit without grade.**

Selective subject in the field of humanities*: Philosophy of nature / Humanistic subject from another faculty (15 hours, 2 ECTS) - credit and mark.

Selective social science subject*: Elements of economics / Social subject from another faculty (30 hours, 3 ECTS) - credit and mark.

Plan studiów zatwierdzono na Radzie Wydziału w dniu 26 kwietnia 2016 r
Zmiany wprowadzono:

Examination is made by a bold and underlined figure

H – hours per week

pt. - ECTS

* - selective subjects,
** - specialty-related elective courses,
***- elective courses within speciality

PLAN OF REGULAR STUDIES, GRADUATE PROGRAMME

faculty: PHYSICS, speciality: COMPUTER ASTROPHYSICS

REGULAR DAILY STUDIES – enrolment 2016/2017

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Subject		figures		(hours per week)								
		Including:		I		II		III		IV		
		H	pt.	H	pt.	H	pt.	H	pt.	H	pt.	
A. GENERAL SUBJECTS												
1	English	30	2	2	2							
2	Physical education*	30	1					2	1			
3	Selective subject*	30	2					2	2			
4	Selective subject in the field of humanities*	15	2			1	2					
5	Selective social science subject*	30	3					2	3			
B. BASIC SUBJECTS												
6	Physics laboratory II	Lab	105	12	7	12						
C. FIELD SUBJECTS												
7	Theoretical physics	T	60	10	4	5						
8	Theoretical physics	L	45		<u>3</u>	5						
9	Solid state physics	T	45					3	4			
10	Solid state physics	L	30	7				<u>2</u>	3			
11	Quantum physics	T	45			3	4					
12	Quantum physics	L	30	7		<u>2</u>	3					
13	Nuclear and high energy physics	T	30					2	3			
14	Nuclear and high energy physics	L	30	6				<u>2</u>	3			
15	Introduction to the physics of atoms and particles	T	30			2	3					
16	Introduction to the physics of atoms and particles	L	30	6		<u>2</u>	3					
D. SPECIALIZATION SUBJECTS**												
17	Astrophysics I	Lab	30	6	2	4						
18	Astrophysics I	L	15		<u>1</u>	2						
19	Astrophysics II	Lab	30	6			2	3				
20	Astrophysics II	L	30			<u>2</u>	3					
21	Extragalactic astronomy and cosmology	Lab	15	4		1	2					
22	Extragalactic astronomy and cosmology	L	15			1	2					
23	Astrophysics of compact objects	Lab	30	6						2	4	
24	Astrophysics of compact objects	L	15							<u>1</u>	2	
25	Modern radio astronomy	L	30	2				2	2			
26	High-energy astrophysics	L	30	2				<u>2</u>	2			
27	Radiative processes in astrophysics	Lab	45	5		3	3					
28	Radiative processes in astrophysics	L	30			<u>2</u>	2					
ELECTIVE SUBJECTS***												
29	Graduate seminar I	S	30	3				2	3			
30	Graduate seminar II	S	30	4						2	4	
31	General seminar	S	30	4						2	4	
32	Monographic lecture I	L	30	4				<u>2</u>	4			
33	Monographic lecture II	L	30	4						<u>2</u>	4	
34	MASTER'S THESIS			12							12	
35	MAGISTER EXAMINATION									E		
Sum:		1080	120		19	30	21	30	23	30	9	30
NUMBER OF EXAMINATIONS					<u>2E</u>	<u>4E</u>		<u>4E</u>		<u>2E+</u>	<u>E</u>	

Legend: L - lecture, T - Tutorials, Lab - laboratory, Pr -practice, S – seminar
 The lecture courses are closed with an examination
 Tutorials, laboratories and seminars — **credit and mark**

Examination is made
by a bold and underlined figure
 H – hours per week
 pt. - ECTS

Subjects:

General seminar, Graduate seminar I, II — **credit and mark.**
 Extragalactic astronomy and cosmology, Modern radio astronomy —
credit and mark.

* - selective subjects,
 ** - speciality-related elective courses,
 *** - elective courses within speciality

Selective subject*: Variety in unity in biological sciences, University-wide elective courses or from another field
 of study (30 hours, 2 ECTS) - credit without grade. Physical education - credit without grade.

Selective subject in the field of humanities*: Philosophy of nature / Humanistic subject from another faculty
 (15 hours, 2 ECTS) - credit and mark.

Selective social science subject*: Elements of economics / Social subject
 from another faculty (30 hours, 3 ECTS) - credit and mark.

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 Zmiany wprowadzono: