## WYDZIAŁ FIZYKI UW

Field of study: Physics (Studies in English)											
2-year second cycle programme, full-time											
Academic year: <b>2021/2022</b>											
Specialization: Optics											
First year, semester 1											
	Course name/ group of courses	Type of course	Number of hours		Verification of effects related to the course	Total number of ECTS points					
1	Physics Laboratory, 2nd Level A1	laboratory									
1	or Physics Laboratory, 2nd Level A2	class	45	45	grade	5					
2	Courses selected from the list	lecture	45		exam: written or oral	7					
	Statistical physics	exercises	45	90							
3	Intellectual property and entrepreneurship or Intellectual property and entrepreneurship with team project	lecture/lecture and project	30/105	30/105	written exam/ project	2/5					
	F	irst year, seme	ster 2								
	Course name/ group of courses	Type of course	Number of hours		Verification of effects related to the course	Total number of ECTS points					
	1.4 1.6 4.50										
1	Introduction to Philosophy	lecture	30	30	grade	3					
2	Proseminar: Optics	seminar	30	30	grade	3					
3	Optics Laboratory I	laboratory class	180	180	grade	16					
Other courses to be completed in the 1 <sup>st</sup> and/or 2 <sup>nd</sup> semester											
	Course name/ group of courses	Type of course	Number of hours		Verification of effects related to the course	Total number of ECTS points					
1	Courses colored from the list				Va con 144						
1	Courses selected from the list Numerical analysis		60	60	written exam or grade	6					
2	Courses selected from the list Topics in contemporary physics - electives (Option A or/ Option B)		60/30	60/30	written exam or grade	6/3					
3	Selected specialization courses		120	120	written exam	12					
	In total		min.645	min.645		60					

## WYDZIAŁ FIZYKI UW

Field of study: Physics (Studies in English)											
2-year second cycle programme, full-time											
Academic year: 2021/2022											
Specialization: Optics Second year, semester 1											
	Course name/ group of courses	Type of course	Number of hours		Verification of effects related to the course	Total number of ECTS points					
1	Optics Laboratory II	laboratory									
'	Optics Laboratory II	laboratory class	210	210	grade	19					
2	Optics seminar	seminar	60	60	grade	4					
Second year, semester 2											
	Course name/ group of courses	Type of course	Number of hours		Verification of effects related to the course	Total number of ECTS points					
1	Proseminar Challenges of the modern times	seminar	20	20	grade	2					
2	Optics Laboratory III	workshop	210	210	pass/fail (no grade)	19					
Other courses to be completed in the 1 <sup>st</sup> and/or 2 <sup>nd</sup> semester											
	Course name/ group of courses	Type of course	Number of hours		Verification of effects related to the course	Total number of ECTS points					
1	Work placement				pass/fail (no						
	·		80	80	grade)	4					
2	Team project**	project	75	75	grade	5					
3	Selected specialization courses		60	60	written exam or grade	6					
4	General courses (OGUN)*		30	30	written exam or grade	6					
	In total		min.670	min.670		60/65					

<sup>\*</sup>in total 6 ECTS required within the duration of the programme, including 5 ECTS points unrelated to physical sciences, i.e. humanities and social sciences;

\*\* Team project can be completed as a separate course or within a course if the course coordinator

requires team work