

Field of study: *Physics (Studies in English)*

Profile: general academic

2-year second cycle program, full-time

Academic year: 2025/2026

Specialization: **Theoretical Physics**

## First year, semester 1

			Option A		Option B		
Course title	Course code	Form of classes	Number of hours	Number of ECTS points	Number of hours	Number of ECTS points	Learning outcomes assessment
Physics Laboratory, 2nd A	1100-4PLA	lab	45	5	45	5	written report (grade#)
Elective course from the Statistical physics list	1100-4SPA or 1100-4SPB	lecture	45	7	45	7	written or oral exam
		exercises	45		45		
Intellectual property and entrepreneurship (Option A) or Intellectual property and entrepreneurship with team project (Option B)	1100-4IPE or 1100-4AF16	lecture	30	2	30	5	written exam
		project	0	0	75		project
Subject to choose from the Numerical analysis list			30	3	30	3	written exam or grade
Elective course from the Advanced Quantum Mechanics list		lecture	30	6	30	6	written or oral exam
		exercises	30		30		
Electives from the Topics in contemporary physics list			30	3	30	3	written exam or grade
Specialist seminar		seminar	30	2	30	2	grade
OGUN (General University Courses)*			30	3	30	3	written exam or grade
In total (1st semester)			345	31	420	34	

## First year, semester 2

			Option A		Option B		
Course title	Course code	Form of classes	Number of hours	Number of ECTS points	Number of hours	Number of ECTS points	Learning outcomes assessment
Introduction to Philosophy	1100-IP	seminar	30	3	30	3	grade
Subject to choose from the Numerical analysis list			30	3	30	3	written exam or grade
Electives from the Topics in contemporary physics list (Option A or Option B)			180	18	150	15	written exam or grade
Specialist seminar		seminar	30	2	30	2	grade
OGUN (General University Courses)*			30	3	30	3	written exam or grade
In total (2nd semester)			300	29	270	26	

Second year, semester 3							
			Option A***		Option B		
Course title	Course code	Form of classes	Number of hours	Number of ECTS points	Number of hours	Number of ECTS points	Learning outcomes assessment
Work placement	1100-WP	internship	80	4	80	4	written report (grade)
Team project**	1100-TP or 1100-ZPS2	project	75	5	0	0	grade
Electives from the Topics in contemporary physics list			120	12	120	12	written exam or grade
Specialist seminar		seminar	60	4	60	4	grade
Workshop in theoretical physics I	1100-5WTP1	workshop	120	10	120	10	grade
In total (3rd semester)			455	35	380	30	

Second year, semester 4					
Course title	Course code	Form of classes	Number of hours	Number of ECTS points	Learning outcomes assessment
Proseminar Challenges of the modern times	1100-PCMT	seminar	20	2	grade
Proseminar Theoretical physics	1100-5sTP	seminar	30	3	grade
Workshop in theoretical physics II	1100-5WTP2	workshop	240	25	submission of a master's thesis accepted by the supervisor
In total (4th semester)			290	30	

		Option A		Option B	
In total		Number of hours	Number of ECTS points	Number of hours	Number of ECTS points
1 year		645	60	690	60
2 year		745	65	670	60
1 and 2 year		1390	125	1360	120

#### Comments:

\* The completion of 5 ECTS from subjects in the fields of humanities or social sciences is required as part of the study program.

\*\* A team project can be completed within a dedicated course or as part of other courses in the study program, provided that the organization of the subject's classes involves teamwork.

\*\*\* Option A is obligatory for those students who did not complete a team project during the first year

# Passing with a grade means that the grade is awarded based on one or more written assessments conducted during the course of the didactic classes or based on one or more written assignments carried out during the period of didactic classes, following the subject's syllabus.