

Bachelor in Physics, University of Bonn

180 LP*	Experimental physics	Laboratory	Mathematics	Theoretical Physics	Elective	Overview exams	Extra courses	Bachelor thesis
1. Sem.	physics110/111		math140/141		physics120		physics130/131	
	Physics I Mechanics, Thermodynamics		Mathematics I for Physicists				Introduction to EDP	
	4+2 SWS 7 LP		6+3 SWS 13 LP				1+2 SWS 4 LP	
2. Sem.	physics110/211	physics260/112	math240/241	physics220/221	Courses from Astronomy / Chemistry / Informatics / Meteorology / Business studies / Economics / Philosophy			
	Physics II Electromagnetism	Lab course Mechanics, Thermodynamics	Mathematics II for Physicists	Theoretical Physics I Mechanics				
	4+2 SWS 7 LP	3 SWS 3 LP	4+3 SWS 11 LP	4+3 SWS 9 LP				
3. Sem.	physics110/311	physics360/212	math340/341	physics320/321				
	Physik III Optics and wave mechanics	Lab course Electromagnetism	Mathematics III for Physicists	Theoretical Physics II Electrodynamics	physics450			
	4+2 SWS 7 LP	3 SWS 3 LP						
		Lab course Optics and wave mechanics						
4. Sem.	physics410/411	physics460/313	4+3 SWS 11 LP	4+3 SWS 9 LP				
	Physics IV Atoms, Molecules, Condensed Matter	Lab course electronics + block lecture	Numerical methods of Physics	Theoretical Physics III Quantum mechanics				
	4+2 SWS 7 LP	4 SWS 4 LP	2+2 SWS 6 LP	4+3 SWS 11 LP				
5. Sem.	physics410/511	physics 560/412		physics520/521	8 LP	physics530/531	physics540/541	physics590
	Physics V Cores and Particles	Lab course Atoms, Molecules, Condensed Matter		Theoretical Physics IV Statistical Physics	Compulsory course	Examination Experimental Physics	Seminar Presentation	Bachelor thesis
	4+2 SWS 7 LP	5 SWS 5 LP		4+3 SWS 9 LP		physics530/532	3 SWS 3 LP physics540/542	
6. Sem.		physics660/512				Examination Theoretical Physics	Seminar for Bachelor thesis	
		Lab course Cores and Particles						
		5 SWS 5 LP			6 LP	4 LP	2 SWS 2 LP	12 LP

* LP: Credits, 1LP= 30h of work
SWS (x+y): Hours per week for lecture (x) and exercise classes (y).