

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				Courses from Astronomy / Chemistry / Informatics / Meteorology / Business studies / Economics / Philosophy				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		Compulsory course															
	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																	
	4+2 SWS	7 LP	3 SWS	3 LP																				
			Physics360/312																					
			Lab course Optics and wave mechanics		4+3 SWS		11 LP	4+3 SWS									9 LP							
4. Sem.	physics410/411		physics460/313		physics440/441		physics420/421										physics450							
	Physics IV Atoms, Molocules, 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										Compulsory course		physics530/531		physics540/541		physics590	
	Physics V Cores and Paritcles		Lab course Atoms, Molocules, Condensed Matter				Theoretical Physics IV Statistical Physics		Examination Experimental Physics		Seminar Presentation		Bachelor thesis											
	4+2 SWS	7 LP	5 SWS	5 LP			4+3 SWS	9 LP		4 LP	3 SWS	3 LP												
6. Sem.			physics660/512				physics530/532		physics540/542															
			Lab course Cores and Paritcles				Examination Theoretical Physics		Seminar for Bachelor thesis															
			5 SWS				5 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).