

2	MA200	Applied Mathematics, Science, Technology and Engineering	3		X							
TOTAL			6	3	3	0	0	0	0	0	0	0

4. CONCENTRATION COMPETENCY COURSES (MKKIPS)

NO	CODE	NAME	CHS	SEMESTER								
				1	2	3	4	5	6	7	8	
1	FI120	Basic Mathematics	3	X								
2	FI220	English	2	X								
3	FI121	Basic Physics I	4	X								
4	FI223	Basic Physics Experiment I	2(2)	X								
5	FI221	Entrepreneurship	2		X							
6	FI222	Mathematical Physics I	4		X							
7	FI122	Basic Physics II	4		X							
8	FI224	Basic Physics Experiment II	2(2)		X							
9	FI240	Mathematical Physics II	4			X						
10	FI340	Mechanics	4			X						
11	FI341	Thermodynamics	3			X						
12	FI241	Analog Electronics	3(1)			X						
13	FI342	Optics	2			X						
14	FI343	Fluid Physics	2			X						
15	FI140	Basic Concepts of Earth and Space	3				X					
16	FI344	Electricity and Magnetism	4				X					
17	FI441	Digital Electronics	3(1)				X					
18	FI242	Algorithm and Programming	3(1)				X					
19	FI345	Wave	4				X					
20	FI360	Modern Physics	4					X				
21	FI460	Wave and Electromagnetism Experiment	2(2)					X				
22	FI560	Quantum Physics	4					X				
23	FI461	Computational Physics	4(1)					X				
24	FI561	Solid State Physics	4						X			
25	FI462	Modern Physics Experiment	2(2)						X			
26	FI562	Nuclear Physics	4						X			
27	FI563	Research Methodology and Scientific Publication	3						X			
28	FI381	History of Physics	2							X		
29	FI580	Statistical Physics	3							X		
30	FI481	Modeling and Simulation of Physics	3							X		
31	FI581	Seminar on Physics	3							X		
32	FI598	Thesis	6									X
33	FI599	Thesis Defense	0									X
TOTAL			102	11	12	18	17	14	13	11	6	

TOTAL	4	0	0	0	0	0	0	0	4
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	CHS	CHS SEMESTER							
		1	2	3	4	5	6	7	8
TOTAL CREDIT HOURS (CHS)	145	20	21	20	19	19	20	16	10

Konversi ECTS

2 SKS = 3,2 ECTS, Contact Hour = 100 minutes

Total workload is 90 hours 40 minutes (3.2 ECTS) which consist of 26 hours 40 minutes of lectures (0.94 ECTS), 32 hours of structured activities (1.14 ECTS) and 32 hours of self-study (1.14 ECTS)

3 SKS = 4,8 ECTS, Contact Hour = 150 minutes

Total workload is 136 hours (4.8 ECTS) which consist of 40 hours of lectures (1.41 ECTS), 48 hours of structured activities (1.71 ECTS) and 48 hours of self-study (1.71 ECTS)

4 SKS = 6,4 ECTS, Contact Hour = 200 minutes

Total workload is 181 hours 20 minutes (6.4 ECTS) which consist of 53 hours 20 minutes of lectures (1.88 ECTS), 64 hours of structured activities (2.28 ECTS) and 64 hours of self-study (2.28 ECTS)