Curriculum Stucture

Courses in 1st Year

Semester 1				Semester 2			
No	Code	Name of Courses	CU	No	Code	Name of Courses	CU
1	1000002003	Indonesian	2	1	1000002026	Religion	2
2	4520103026	Biology	3/1	2	4520103021	English	3
3	4520104055	Basic Physics I	3	3	4520102203	Philosophy of Natural Sciences	2
4	4520103104	Chemistry	3/1	4	4520104057	Basic Physics II	3
5	4520103118	Basic Mathematics	3/1	5	4520104070	Mathematics of Physics I	3
6	1000002018	Pancasila	2	6	4520102227	Digital Literacy	2
7	4520101221	Experiment of Basic Physics I	1	7	4520102107	KSDA	2
8	4520102196	Physics Measurement System	2	8	1000002033	Civic Education	2
				9	4520101229	Experiment of Basic Physics 2	1
TOTAL CU			**19**	**TOTAL CU**			**20**
TOTAL ECTS			**30,21**	**TOTAL ECTS**			**31,80**

Courses in 2nd Year

Semester 3				Semester 4			
No	Code	Name of Courses	CU	No	Code	Name of Courses	CU
1	4520103053	Earth Physics	3	1	4520103042	Basic Elektronics II	2
2	4520103041	Basic Electronics I	2	2	4520101231	Experiment of Basic Elektronics 2	1
3	4520101230	Experiment of Basic Electronics I	1	3	4520103233	Mathematics of Physics 3	3
4	4520104127	Mechanics	4	4	4520103074	Modern Physics	2
5	4520104071	Mathematics of Physics 2	3	5	4520102203	Statistics	2
6	4520103209	Themodinamics	3	6	4520103114	Electromagnetics	2
7	4520104086	Science of Materials	3	7	4520103084	Waves	2
8	1000002011	ISBD	2	8	4520102034	Experiement Physics I	2
9	4520102219	Physical Education and Fitness	2	9	4520102216	Enterpreneurships	2
TOTAL CU			**23**	**TOTAL CU**			**19**
TOTAL ECTS			**36,57**	**TOTAL ECTS**			**30,21**

Courses in 3rd Year

Semester 5				Semester 6			
No	Kode	Nama Matakuliah	CU	No	Kode	Nama Matakuliah	CU
1	4520104065	Quantum Physics	4	1	4520103082	Solid-state Physics	3
2	4520102149	Optics	2	2	4520103079	Statistic of Physics	3
3	4520103043	Electronics (Advanced)	2	3	4520102105	Colloquium	2
4	4520102143	Research Methodology	2	4	4520102116	Industrial Management	2
5	4520102035	Experiement Physics II	2	5	4520102239	Experiement Physics III	2
6	452010OS1	Option Odd Semester-1	2	6	452010ES-1	Option even semester-1	2
7	452010OS2	Option Odd Semester-2	2	7	452010ES-2	Option even semester-2	2
8	452010OS3	Option Odd Semester-3	2	8	452010ES-3	Option even semester-3	2

				9	452010ES-4	Option even semester-4	2
TOTAL CU			**19**	**TOTAL CU**			**20**
TOTAL ECTS			**30,21**	**TOTAL ECTS**			**31,80**

Courses in 4th Year

Semester 7				Semester 8			
No	Kode	Nama Matakuliah	CU	No	Kode	Nama Matakuliah	CU
1	4520103137	Nuclear Physics	3	1	4520106199	Thesis	6
2	4520102217	PKL	3	2	452010ES-5	Option Even Semester-5	2
3	4520102049	Community Service Program	3	3	452010ES-6	Option Even Semester-6	2
4	452010OS-4	Option Odd Semester-4	2				
5	452010OS-5	Option Odd Semester-5	2				
	452010OS-6	Option Odd Semester-6	2				
TOTAL CU			**15**	**TOTAL CU**			**10**
TOTAL ECTS			**23,85**	**TOTAL ECTS**			**15,90**

Optional Courses

Odd Semester					**Even Semester**				
No	Course Code		Name of Course	CU	No	Course Code		Name of Course	CU
1	4520102075	452010 **OS-1**	Physical Oceanography-1	2	1	4520102248	452010 **ES-1**	Physics of Atmosphre-1	2
2	4520102237		Control System-1	2	2	4520102076		Polimer Physics-1	2
3	4520103018		Alloy Material-1	2	3	4520102197		Microcontroller-1	2
4	4520103111	452010 **OS-2**	Diffraction Data Analysis-2	2	4	4520102150	452010 **ES-2**	Optoelectronics-2	2
5	4520102007		Physical System Analysis-2	2	5	4520102098		Ceramics-2	2
6	4520103169		Digital Signal Processing-2	2	6	4520102058		Physics of Volcanoes-2	2
7	4520102077	452010 **OS-3**	Physics of Seismology-3	2	7	4520102242	452010 **ES-3**	Robotics-3	2
8	4520103210		Thermodynamics of Materials-3	2	8	4520102246		Physics of Tsunami-3	2
9	4520102250		Sensor-3	2	9	4520103137		Material Characterization Method-3	2
10	4520102067	452010 **OS-4**	Metal Physics-4	2	10	4520103244	452010 **ES-4**	Energy Materials-4	2
11	4520102252		Introduction to Geodynamics and Geothermal-4	3	11	4520102247		Mitigation of Natural Disasters-4	2
12	4520103109		Corrosion-4	2	12	4520102096	452010 **ES-5**	Capita Selekta Material Physics-5	2
13	4520103130	452010 **OS-5**	Material Fabrication Methods-5	3					
14	4520103037		Electroacoustic-5	2					
15	4520102142		Geophysical Measurement Method-5	2					
16	4520102254	452010 **OS-6**	Geophysical Fluids Dynamics-6	2					
17	4520102251		Medical Physics-6	2					
TOTAL CU				**30**	**TOTAL CU**				**24**
TOTAL ECTS				**47,70**	**TOTAL ECTS**				**38,16**