

Curriculum Structure of Bachelor of Environmental Engineering

No	Subject		Study Load on Activities (SKS)		
	Code	Name	Course & Tutorials	Practice	Total
(1)	(2)	(3)	(4)	(5)	(6)
Semester 1					
Compulsory					
1	AGI 101	Islamic Religion	2		2
	AGK 101	Catholicism			
	AGP 101	Protestant Religion			
	AGH 101	Hinduism			
	AGB 101	Buddhism			
	AGC 101	Confucianism			
2	NOP 103	Pancasila	2		2
3	NOP 104	Civic	2		2
4	BAI 101	Indonesian	2		2
5	SIP 107	Data and Libraries	2		2
6	BID 101	Basic Biology	2		2
7	KID 101	Basic Chemistry	2		2
8	BID	Lab Practice for Basic Biology		1	1
9	KID	Lab Practice for Basic Chemistry		1	1
10	LKB 104	Introduction to Environmental Science and Technology	2		2
Elective					
-	-	-	-	-	-
Semester 1 Sub-Total			16	2	18
Semester 2					
Compulsory					
1	PHP 103	Logic and Critical Thinking	2		2
2	MNN 107	Introduction to Scientific Collaboration	2		2
3	MNN 106	Communication and Self Development	2		2
4	MATT	Calculus	3		3
5	FID	Basic Physics	2		2
6	FID	Lab Practice for Basic Physics		1	1
7	LKB 201	General Ecology	2		2
8	LKB 203	Lab Practice for General Ecology		1	1

9	LKT 208	Engineering Drawing	2		2
10	LKT	Practice for Engineering Drawing		1	1
11	BAE 111	English I	2		2
Elective					
-	-	-	-	-	-
Semester 2 Sub-Total			17	3	20
Semester 3					
Compulsory					
1	MATT	Mathematics for Environmental Engineering	2		2
2	LKT	Fluid Mechanics	3		3
3	LKT 203	Structure Knowledge	2		2
4	LKK 301	Environment Chemistry	2		2
5	LKK 302	Lab Practice for Environmental Chemistry		1	1
6	BIM 303	Environmental Microbiology	2		2
7	BIM 309	Lab Practice for Environmental Microbiology		1	1
8	LKD 303	Methods of Environmental Analysis Techniques	2		2
9	LKD 304	Lab Practice Methods of Environmental Analysis Techniques		1	1
10	LKB 204	Natural Resource Management	2		2
Elective (Maximum three courses)					
1	LKT 308	Environmental Remote Sensing	2		2
2	LKB 304	Watershed Management	2		2
3	LKB 311	Integrated Management of Coastal and Marine Areas	2		2
4	LKB 307	Marine Pollution and Its Control	2		2
Semester 3 Sub-Total			21	3	24
Semester 4					
Compulsory					
36	MATT	Environmental Engineering Mathematics II	2		2
37	LKT 303	Soil Mechanics and Hydrogeology	2		2

38	LKT	Environmental Engineering Operations Unit	3		3
39	LKT	Environmental Engineering Operations Unit Practicum		1	1
40	LKT	Environmental Engineering Process Unit	3		3
41	LKT	Environmental Engineering Process Unit Practicum		1	1
42	LKB 205	Ecotoxicology	2		2
43		Environmental Statistics	2		2
44	MNP	Company and Organization Management	2		2
Elective (Maximum three courses)					
45	SII 307	Environmental Geographic Information System	2		2
46	LKB 302	Biomonitoring	2		2
47	LKT	Plumbing and Pump Planning	2		2
48	LKT	New and Renewable Energy	2		2
Semester 4 Sub-Total			22	2	24
5th semester					
Compulsory					
49	LKT 206	Drinking Water Supply System	2		2
50	LKT	Lab Practice for Drinking Water Supply System		1	1
51	LKT	Wastewater Distribution System	2		2
52	LKT	Lab Practice for Wastewater Distribution System		1	1
53	LKT 301	Solid Waste Management	2		2
54	LKT	Lab Practice Solid Waste Management		1	1
55	LKT	Air Pollution Prevention and Control	3		3
56	LKT	Introduction to Environmental Documents	2		2
57	PNT 497	Research Methods	2		2
Electives (Maximum 4 courses)					
57	LKT	Management and Quality of Water Resources	2		2

58	LKT	City Territory and Spatial Planning	2		2
59	LKT	Environmental Bioremediation and Phytotechnology	2		2
60	LKT	Environmental Geotechnic	2		2
61	LKT	Conversion Engineering and Energy Efficiency	2		2
Semester 5 Sub-Total			21	3	24
6th semester					
Compulsory					
62	LKT	Lab Practice for Drinking Water Treatment Building Planning	3		3
63	LKT	Lab Practice for Drinking Water Treatment Building Planning		1	1
64	LKT	Hazardous Waste Management	3		3
65	MNK 204	Project Management	2		2
66	KMK 201	Occupational Health and Safety	2		2
67	HKA 104	Environmental Law	2		2
68	LKT	Technopreneurship	2		2
Electives (Maximum four courses)					
69	LKT	Environmental Management System	2		2
70	LKT	Life Cycle Analysis (LCA)	2		2
71	LKT	Landfill Planning	2		2
72	LKT	Environmental Sanitation Infrastructure	2		2
73	LKT	Environmental Drainage	2		2
Semester 6 Sub-Total			22	1	23
7th semester					
Compulsory					
74	LKT	Wastewater Processing Building Planning	3		3
75	LKT	Lab Practice for Wastewater Processing Building Planning		1	1
76	TLC 301	Internship	3		3
77	KNT 401	Community Service	3		3
78	PNT 498	Thesis proposal	2		2
Elective (8 credits)					
79	LKT	Industrial Waste Treatment	2		2
80	LKT	Strategic Environmental Assessment (KLHS)	2		2

81	LKT	Rehabilitation, Restoration and Environmental Conservation	2		2
82	LKT	Economics and Environmental valuation	2		2
Sub-Total Semester 7			19	1	20
Semester 8					
Must					
83	PNT 499	Thesis	6		6
Choice (6 credits)					
84	LKT	Current Issues in Environmental Engineering	2		2
85	LKT	Environmental Engineering Materials Knowledge	2		2
86	MFI 202	Environmental Modeling	2		2
Semester 8 Sub-Total			12		12