

COURSES

List of courses in the undergraduate program of Environmental Engineering.

Semester 1

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	Basic Physics	3	Compulsory	
2	Islam Ulil Albab	3	Compulsory	
3	Calculus I	4	Compulsory	
4	General Chemistry	4	Compulsory	
5	Islamic Religion	2	Compulsory	
6	Introduction to Environmental Engineering	2	Compulsory	
7	Basic Physics Laboratory Course	1	Compulsory	
8	General Chemistry Laboratory Course	1	Compulsory	

Semester 2

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	<i>Bahasa Indonesia</i>	2	Compulsory	
2	English	2	Compulsory	
3	Calculus II	4	Compulsory	Calculus I
4	Environmental Chemistry	4	Compulsory	General Chemistry
5	Fluid Mechanics	4	Compulsory	
6	Engineering Drawing	3	Compulsory	
7	Environmental Chemistry Laboratory Course	1	Compulsory	

Semester 3

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	Ecology	2	Compulsory	Introduction to Environmental Engineering
2	Epidemiology and Fundamental of Sanitation	3	Compulsory	Introduction to Environmental Engineering
3	Hydraulics	2	Compulsory	Fluid Mechanics
4	Earth Sciences	2	Compulsory	
5	Numerical Methods	2	Compulsory	Calculus II
6	Environmental Microbiology	2	Compulsory	Introduction to Environmental Engineering
7	State Ideology	2	Compulsory	

8	Environmental Microbiology Laboratory	1	Compulsory	
9	Soil Engineering	2	Compulsory	
10	Environmental Statistics	2	Compulsory	

Semester 4

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	Environmental Anthropology	2	Compulsory	
2	Hydrology and Geohydrology	2	Compulsory	Environmental Statistics
3	Environmental Laboratory	2	Compulsory	Environmental Chemistry
4	Environmental Mapping	2	Compulsory	Earth Sciences
5	Introduction to Structural Analysis	3	Compulsory	Soil Engineering
6	Plumbing	3	Compulsory	Fluid Mechanics
7	Environmental Laboratory Practical Course	1	Compulsory	Environmental Ch
8	Environmental Engineering Laboratory Course I	1	Compulsory	Environmental Ch
9	Unit Operation and Process	4	Compulsory	Hydraulics

Semester 5

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	Drainage and Sewerage	2	Compulsory	Epidemiology and Fundamental of Sanitation
2	Industrial Hygiene	2	Compulsory	
3	Islam Rahmatan Lil'alamin	2	Compulsory	State Ideology
4	Environmental Modelling	2	Compulsory	Numerical Methods
5	Air Pollution	3	Compulsory	Environmental Laboratory
6	Hazardous Waste Management	3	Compulsory	Environmental Chemistry
7	Solid Waste Management	1	Compulsory	Epidemiology and Fundamental of Sanitation
8	Water Resources Management	1	Compulsory	Hydrology and Geohydrology
9	Environmental Engineering Laboratory Course II	4	Compulsory	Environmental Engineering Laboratory Course I

Semester 6

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	Fieldwork	2	Compulsory	
2	Occupational Safety and Health	2	Compulsory	Industrial Hygiene
3	Citizenship	2	Compulsory	
4	Research Methodology	2	Compulsory	
5	Wastewater Treatment Plant Design	3	Compulsory	Drainage and Sewerage
6	Environmental Quality Management	2	Compulsory	Industrial Hygiene
7	Water Supply System	4	Compulsory	Unit Operation and Process
8	<i>Elective Course 1</i>	2	Elective	
9	<i>Elective Course 2</i>	2	Elective	

Semester 7

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	Environmental Impact Assessment	3	Compulsory	Environmental Quality Management
2	Islamic Entrepreneurship	2	Compulsory	Environmental Laboratory
3	Community Services	2	Compulsory	
4	Project Management	2	Compulsory	Introduction to Structural Analysis
5	Industrial Waste Treatment	2	Compulsory	Wastewater Treatment Plant Design
6	<i>Elective Course 3</i>	2	Elective	
7	<i>Elective Course 4</i>	2	Elective	
8	<i>Elective Course 5</i>	2	Elective	

Semester 8

No	Subject	Credit	Status (Compulsory/Elective)	Prerequisite
1	Professional Ethics	2	Compulsory	Environmental Anthropology
2	Environmental Law	2	Compulsory	
3	Thesis	4	Compulsory	
4	Elective Course 6	2	Elective	

