

Marmara University – Graduate School
Environmental Engineering– PhD Program (for those who hold a Bachelor’s degree)

1. SEMESTER

No	Code	Course Name	T	P	ECTS
1	ENVE xxxx	Elective – 1	3	0	8
2	ENVE xxxx	Elective – 2	3	0	8
3	ENVE xxxx	Elective – 3	3	0	8
4	ENVE xxxx	Elective – 4	3	0	8
TOTAL			12	0	32

2. SEMESTER

No	Code	Course Name	T	P	ECTS
1	ENVE xxxx	Elective – 5	3	0	8
2	ENVE xxxx	Elective – 6	3	0	8
3	ENVE xxxx	Elective – 7	3	0	8
4	ENVE xxxx	Seminar	0	2	4
TOTAL			9	0	28

3. SEMESTER

No	Code	Course Name	T	P	ECTS
1	ENVE xxxx	Elective – 8	3	0	8
2	ENVE xxxx	Elective – 9	3	0	8
3	ENVE xxxx	Elective – 10	3	0	8
4	ENVE xxxx	Elective – 11	3	0	8
TOPLAM			12	0	32

4. SEMESTER

No	Code	Course Name	T	P	ECTS
1	ENVE xxxx	Elective – 12	3	0	8
2	ENVE xxxx	Elective – 13	3	0	8
3	ENVE xxxx	Elective – 14	3	0	8
4	FBE Elective	Elective - 15	3	0	4
TOTAL			9	0	28

Scientific Prep.: 1. SEMESTER

No	Code	Course Name	T	P	ECTS
1	ENVE 201	Environmental Engineering Chemistry I	2	2	5
2	ENVE 301	Environmental Engineering Unit Operations	3	2	5
3	ENVE 303	Environmental Engineering Microbiology	2	2	4

Scientific Prep.: 2. SEMESTER

No	Code	Course Name	T	P	ECTS
1	ENVE 202	Environmental Engineering Chemistry II	3	2	6
2	ENVE 204	Engineering Hydraulics	3	2	6
3	ENVE 302	Environmental Engineering Unit Processes	3	2	6
4	ENVE 422	Wastewater Engineering Design	3	2	12

E1, E2, E3, E4: 1. semester / E5, E6, E7: 2. semester

N o	Ders Kodu	Ders Adı	T	U	ECTS
1	ENVE 7002	Reaction Kinetics and Mass Transfer	3	0	8
2	ENVE 7003	Fate of Pollutants in the Environment	3	0	8
3	ENVE 7009	Advanced Air Pollution	3	0	8
4	ENVE 7010	Computer Applications and Modeling in Environmental Engineering	3	0	8
5	ENVE 7012	Advanced Oxidation Processes	3	0	8
6	ENVE 7014	Soil and Groundwater Remediation	3	0	8
7	ENVE 7017	Water Reuse	3	0	8
8	ENVE 7019	Advanced Wastewater Treatment	3	0	8
9	ENVE 7021	Micropollutants	3	0	8
10	ENVE 7023	Industrial Waste Treatment	3	0	8
11	ENVE 7024	Advanced Topics in Biological Treatment	3	0	8
12	ENVE 7025	Environmental Biotechnology	3	0	8
13	ENVE 7026	Biological Nutrient Removal	3	0	8
14	ENVE 7027	Special Topics in Water Treatment	3	0	8
15	ENVE 7028	Water Chemistry	3	0	8
16	ENVE 7029	Special Topics in Wastewater Treatment	3	0	8
17	ENVE 7031	Special Topics in Air Pollution	3	0	8
18	ENVE 7033	Special Topics in Environmental Engineering	3	0	8
19	ENVE 7035	Formation and Control of Disinfection By-Products	3	0	8
20	ENVE 7036	Ion Exchange and Membrane Processes in Environmental Engineering	3	0	8

E1, E2, E3, E4: 1. YARIYIL / E5, E6, E7: 2. YARIYIL

No	Ders Kodu	Ders Adı	T	U	ECTS
21	ENVE 7037	Anaerobic Biotechnology for Bio-energy Production	3	0	8
22	ENVE 7038	Sampling and Analyses of Air Pollutants	3	0	8
23	ENVE 7039	Atmospheric Deposition of Air Pollutants	3	0	8
24	ENVE 7040	Novel Sludge Treatment and Removal Techniques	3	0	8
25	ENVE 7041	Biological Wastewater Treatment	3	0	8
26	ENVE 7042	Process Design and Wastewater Engineering	3	0	8
27	ENVE 7045	Open Channel Hydraulics	3	0	8
28	ENVE 7062	Environmental Nanotechnology	3	0	8
29	ENVE 7063	Integrated Water Resources Management	3	0	8

E8, E9, E10, E11: 3. SEMESTER / E12, E13, E14: 4. SEMESTER

No	Ders Kodu	Ders Adı	T	U	ECTS
1	ENVE 8001	Theory and Application of Filtration	3	0	8
2	ENVE 8008	Particle Technology for Environmental Engineering	3	0	8
3	ENVE 8009	Advanced Anaerobic Treatment	3	0	8
4	ENVE 8015	Special Topics in Advanced Air Pollution	3	0	8
5	ENVE 8017	Special Topics in Air Pollution Modeling	3	0	8
6	ENVE 8021	Removal of Refractory Organics	3	0	8
7	ENVE 8025	Advanced Biological Nutrient Removal	3	0	8
8	ENVE 8031	Waste Recovery	3	0	8
9	ENVE 8033	Atmospheric Deposition Processes	3	0	8
10	ENVE 8035	Multivariate Statistical Methods in Environmental Pollution	3	0	8
11	ENVE 8037	Air Pollutants and Climate Change	3	0	8
12	ENVE 8039	Atmospheric Processes in Air Pollution	3	0	8
13	ENVE 8041	Environmental Organic Chemistry	3	0	8
14	FBE 8002	Advanced Research Methods	3	0	4
15	FBE 8004	Teaching and Learning in Science and Engineering	3	0	4