Marmara University – Institute of Pure and Applied Sciences
Environmental Engineering (English) – Master's Program

1st Semester

No	Course Code	Course Name	T	U	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**

2nd Semester

No	Course Code	Course Name	T	U	ECTS
1	ENVE 7000	Seminar	0	2	4
2	ENVE xxxx	Elective – 5	3	0	8
3	ENVE xxxx	Elective – 6	3	0	8
4	ENVE xxxx	Elective – 7	3	0	8
		TOTAL	**9**	**2**	**28**

Scientific Prep.: 1st Semester

No	Course Code	Course Name	T	U	ECTS
1	ENVE 2001	Environmental Engineering Chemistry I	2	2	5
2	ENVE 3001	Environmental Engineering Unit Operations	3	2	5
3	ENVE 3003	Environmental Engineering Microbiology	2	2	4
4	ENVE 4011	Water Engineering Design	3	2	10

Scientific Prep.: 2nd Semester

No	Course Code	Course Name	T	U	ECTS
1	ENVE 2002	Environmental Engineering Chemistry II	3	2	6
2	ENVE 2004	Engineering Hydraulics	3	2	6
3	ENVE 3002	Environmental Engineering Unit Processes	3	2	6
4	ENVE 4022	Wastewater Engineering Design	3	2	12

E1, E2, E3, E4: 1st Semester / E5, E6, E7: 2nd Semester

No	Course Code	Course Name	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: 1st Semester / E5, E6, E7: 2nd Semester					
No	**Course Code**	**Course Name**	**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 7053	Principles of Unit Processes in Environmental Engineering	3	0	8
29	ENVE 7054	Principles of Environmental Engineering Unit Operations	3	0	8
30	ENVE 7055	Principles of Water Engineering Design	3	0	8
31	ENVE 7056	Principles of Wastewater Engineering Design	3	0	8
32	ENVE 7057	Principles of Environmental Engineering Microbiology	3	0	8
33	ENVE 7058	Environmental Engineering Fluid Mechanics	3	0	8
34	ENVE 7059	Principles of Environmental Engineering Chemistry I	3	0	8
35	ENVE 7060	Principles of Environmental Engineering Chemistry II	3	0	8
36	ENVE 7061	Environmental Engineering Hydraulics	3	0	8
37	ENVE 7062	Environmental Nanotechnology	3	0	8
38	ENVE 7064	GIS Applications in Environmental Engineering	3	0	8
39	ENVE 7065	GIS Based Network Analysis	3	0	8
40	ENVE 7067	Environmental Life Cycle Assessment	3	0	8

- **Regulations and Legislation of Master's Program:** https://fbe.marmara.edu.tr/ogrenci/yonetmelikler-ve-mevzuat
- Master's Program consist of at least 7 courses, 1 seminar course, and a thesis project. **(Total ECTS must be 60)**
- Seminar courses and thesis work are not credited and are evaluated as either successful or unsuccessful.
- Student must register for at least two courses each semester, and students who submit a thesis proposal must register for the thesis each semester.
- Student, provided that they have not taken during their studies, may select a maximum of 2 undergraduate courses (ECTS equivalencies must be taken into account) and a maximum of 2 doctoral/artistic proficiency courses (total 16 ECTS) and, with the recommendation of the Department Chair and the decision of the Institute Management Board, and the approval of the host institution and the Institute Management Board, up to 2 graduate and/or doctoral-level courses (total 16 ECTS) offered in different programs at the same or different institutes or at other higher education institutions. However, with a total credit of no more than 24, a total of three undergraduate and doctoral courses are counted into course load and Master's program credit.
- Student who has not completed their courses successfully or even has completed successfully but their GPA is below the 2.50, must continue to repeat their courses until they achieve the required GPA in order to access the thesis defense exam.