



**MARMARA UNIVERSITY
FACULTY OF ENGINEERING
ENVIRONMENTAL ENGINEERING DEPARTMENT**

**ENVE 4197/4198 ENGINEERING PROJECT
PROPOSAL FORM
FALL 2024-2025**

Instructor: Elif Soyer

Project Title: Experimental Investigation of Total Organic Carbon Removal: Comparative Analysis of Conventional and Advanced Methods

Proposal No: 1

Number of Students: 3 (*A student group of three, Mürşide Müleyke Topkara, Eda Uras ve Buse Kızılkaya, has started working on this project topic within the scope of the 2209-A - University Students Research Projects Support Program*)

Requirements (from students):

Students are required to conduct experiments, analyze data and present their work once every two weeks. An extended summary of the interpretations and conclusions in a scientific paper format is expected at the end of the study.

Scope of the Project: The optimal conditions for organic matter adsorption in the treatment units of a drinking water treatment plant and an investigation of their relationships with each other will be conducted.

Hardware/Software/Lab/Equipment Requirements: Orbital shaker, heated circulated water bath, dry air, glassware, membrane cell, total organic carbon analyzer, UV-vis spectrometer

Development Plan:

Within the scope of the study, a literature review, visits to treatment facilities, and the acquisition of technical tools and information for optimization will be required.