



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

**ENVE 4197/4198 ENGINEERING PROJECT
PROPOSAL FORM
FALL 2023-2024**

Instructor: Elif Soyer

Project Title: Optimization of Drinking Water Treatment Plants for Organic Matter Removal

Proposal No: 2

Number of Students: 3

Requirements (from students):

Students pursuing a double major with other departments and conducting research on optimization are preferred.

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.