



### MARMARA UNIVERSITY FACULTY OF ENGINEERING ENVIRONMENTAL ENGINEERING DEPARTMENT

### ENVE 4197/4198 ENGINEERING PROJECT PROPOSAL FORM FALL 2019-2020

# Instructor : Elif Soyer

Project Title: Filter media testing methods & filterability

Proposal No: ElifSoyer\_1

Number of Students : 2-3

### **Requirements (from students) :**

Students will be required to conduct experiments, analyze the 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 proposed project focuses on the use of different filter materials in granular filtration.

# Hardware/Software/Lab/Equipment Requirements :

Filter columns, different filer materials, turbidity meter, particle counter, headloss measurement piezometers, chemical pre-treatment units

### **Development Plan :**

- Gathering information about the procedures and methods will be used in this project.
- Choosing and collecting appropriate glassware, chemicals, and equipment.
- Preparation of the glass medium (crushing and sieving).
- Characterization of the filter media.
- Testing the prepared filter medium for different conditions.
- Interpretation of the results and preparation of a thesis report
- Poster presentation at the end of the semester.