



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

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

Instructor : Assoc. Prof. Deniz Akgül

Project Title : Evaluation of new approaches to the enrichment of Anammox bacteria

Proposal No. : 1

Number of Students : 2-4 students

Requirements (from students): This project includes the operation of a lab-scale biological system; therefore, the students are supposed to have completed **ENVE 3002** and **ENVE 3003** courses successfully.

Scope of the Project: This thesis study aims to decrease the enrichment period in Anammox bioreactors.

A 2209 TUBITAK project will be written by the end of the first term.

Hardware/Software/Lab/Equipment Requirements: Spectrophotometer, pH meter, oxygen meter, analytical balance, 105°C oven, 550°C muffle furnace, magnetic stirrer, incubator, peristaltic pumps, vacuum pumps.

Development Plan:

- Development of work plan
- Preparation of TUBITAK project
- Enrichment trial in the lab.