



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

**ENVE 497/498 ENGINEERING PROJECT
PROPOSAL FORM
FALL 2020-2021**

Instructor : Bilge Alpaslan Kocamemi

Project Title: Deammonification in Moving Bed Biofilm Reactor Systems

Proposal No: Bilge Kocamemi_1

Number of Students : 2

Requirements (from students) :

- Reviewing scientific papers
- Analysis of data from active reactors
- Applying simulation tools to the generated data

Students will be expected to meet with the advisor on regular basis to discuss the progress of the study.

Scope of the Project :

- (1) Prepare a review about the subject making detailed literature survey
- (2) Evaluate the various processes occurring simultaneously in a single stage deammonification system already active in the lab
- (3) Running simulation programs (e.g. Biowin) using existing data

Hardware/Software/Lab/Equipment Requirements :

Computer, simulation program (to be provided by the instructor)

Development Plan :

- Literature review
- Understanding details of single-stage deammonification process in MBBR
- Making runs with a simulation program and compare the results with the existing real data

A written report is required. The report should be prepared according to http://dosya.marmara.edu.tr/fbe/tez_formlari/FBE_Tez_Yaz_m_K_lavuzu.pdf.

Also, a poster will be presented at the end of the semester and the **Environmental Engineering Department staff** will grade your work by evaluating your poster.