



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

**ENVE 497/498 ENGINEERING PROJECT
PROPOSAL FORM
FALL 2018**

Instructor : Assoc. Prof. Neslihan Semerci

Project Title : Integration of denitrifying phosphorus removal via nitrite pathway in a carbon-limited municipal sewage

Proposal No. : (NeslihanSemerci_1)

Number of Students : (Max 3 students)

Requirements (from students) : Environmental Engineering Unit Processes (ENVE 302) course

Scope of the Project :

This study aims to achieve denitrifying P removal via nitrite pathway in anoxic zone, simultaneous nitrification–denitrification in aerobic zone by regulating the operational conditions to solve the problem of limiting carbon source.

Hardware/Software/Lab/Equipment Requirements : Reactor, spectrophotometer, peristaltic pumps, Portable Multimeter, Ion Chromatograph

Development Plan :

Literature review
Operation of the biological nutrient removal reactor
Collection of data and evaluation of the results