



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

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

Instructor: Dr. Kamil Erkan

Project Title: Flood Modeling of Selimpaşa District - Istanbul

Proposal No: 1

Number of Students: (Max 4 students) 3

Requirements (from students): Participation into weekly mandatory meetings and performing the weekly tasks until the next meeting.

Scope of the Project: Floods are one of the major geological hazards in Turkey. In this project, the group will quantify the flood hazard potential of Selimpaşa District (Istanbul) for various meteorological conditions. Analyses include quantification of areal precipitation and infiltration, and calculating time of concentration. As a result of the project, amount of peak discharge will be calculated for the different metrological conditions.

Hardware/Software/Lab/Equipment Requirements: Student will need a laptop/PC with Windows OS. The modeling tasks will be using SURFER software. There will be a training period for using SURFER during the first part of the course.

Development Plan:

1. Literature Search / Surfer training
2. Development of methodology
3. Data Collection
4. Data analysis and Interpretations
5. Report writing