



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

**ENVE 4197/4198 ENGINEERING PROJECT
PROPOSAL FORM
FALL 2024-2025**

Instructor : Mete Tayanç

Project Title : Investigating Recent Air Quality Variability over İstanbul

Proposal No. : *MeteTayanc-1*

Number of Students : 2 Students

Requirements (from students) : Student should be able to spend a minimum of 4 hours each week.

Scope of the Project :

Ambient air pollution in both cities and rural areas was estimated to cause 4.2 million premature deaths worldwide per year in 2019 (WHO, 2022). Recent studies of air quality have shown that particulate matter is among the most important pollutants degrading air quality in many cities of Turkey. In this work, students are expected to use archive air quality data of İstanbul provided by Ulusal Hava Kalitesi İzleme Ağı (UHKİA) and study daily and long-term variabilities in the concentrations of conventional pollutants together with the meteorological parameters, and establish special emphasis on PM_{10} , NO_x and O_3 .

Web sites: <https://sim.csb.gov.tr/Services/AirQuality> and
https://sim.csb.gov.tr/STN/STN_Report/StationDataDownloadNew

Hardware/Software/Lab/Equipment Requirements :

Download data from Ulusal Hava Kalitesi İzleme Ağı (UHKİA)
Computer with internet for accessing the necessary information and data
Software (like Office 365) to perform analysis, create figures and tables and write thesis

Development Plan :

1. Literature review, reading, and writing throughout the two semesters
2. Downloading air quality and meteorological data
3. Analysis of data
4. Thesis writing