**MARMARA UNIVERSITY**

**FACULTY OF ENGINEERING**

**ENVIRONMENTAL ENGINEERING DEPARTMENT**

**ENVE 4197/4198 ENGINEERING PROJECT**

**PROPOSAL FORM**

**FALL 2025-2026**

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| **Instructor:** Prof. Dr.Mete Tayanç  **Project Title:** Studying Air Quality over Türkiye via Copernicus Remote Sensing Data and Ground Measurements  **Proposal No.:** *MeteTayanc-1*  **Number of Students:** 1 or 2 Students  **Requirements (from students):** Student should be able to spend a minimum of 4 hours each week. |
| **Scope of the Project:**  Copernicus web site serves as a central hub for accessing, exploring and utilizing the wealth of Earth observation and environmental data provided by the Sentinel-1, Sentinel-2, Sentinel-3, Sentinel-5P, Sentinel-6, Copernicus Contributing Missions (Optical, SAR and DEM), and Sentinel-1 and Sentinel-2 Global Mosaics. A complete archive of remote sensing data exist in one place: https://dataspace.copernicus.eu/. You should go to your area of interest, select data sources, time range and cloud coverage, and inspect the resulting data. Satellite remote sensing data will be compared and validated by the ground-level measurements of Ulusal Hava Kalitesi İzleme Ağı (UHKİA).  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 |