**MARMARA UNIVERSITY**

**FACULTY OF ENGINEERING**

**ENVIRONMENTAL ENGINEERING DEPARTMENT**

**ENVE 4197/4198 ENGINEERING PROJECT**

**PROPOSAL FORM**

**FALL 2024-2025**

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| **Instructor : Rosa M Flores**  **Project Title : Investigating Forest Fires in Turkey with Remote Sensing**  **Proposal No. : RFlores1**  **Number of Students :** (Max 4 students) 4  **Requirements (from students) :** Students will be required to do research on their own and give weekly reports with their progress. Students are expected to spend at least 5 hours per week working in their thesis. |
| **Scope of the Project :**  Forest fires in Turkey significantly contribute to air pollution, particularly during the summer months. Forest fires release particulate matter, carbon monoxide, carbon dioxide, nitrogen oxides, and volatile organic compounds, contributing to climate change, and poor air quality and human health in local and regional areas near the origin of fire. In this project, students will use remote sensing data from US and European satellites to estimate the variability (i.e., number, duration, etc.) and impact of Forest Fires in the air pollution of Turkey. |
| **Hardware/Software/Lab/Equipment Requirements :**  Microsoft Excel for statistical analysis  Microsoft word for writing thesis  Endnote for manipulation of citations  OriginPro for elaboration of figures |
| **Development Plan :**   1. Literature review with results in other urban areas 2. Downloading necessary data for statistical analysis 3. Transferring data to proper software. Elaboration of graphs 4. Interpretation of results and data analysis 5. Writing dissertation |