**2023-2024 SEMESTER**

**MECHANICAL ENGINEERING DEPARTMENT**

**GRADUATION PROJECT PROPOSAL FORM**

|  |  |
| --- | --- |
| **Lecture Code: MEC 400** | **Lecture Name: Graduation Project** |
|  |  |  |  |

|  |  |
| --- | --- |
| **Project Title / Number of Students:** | Airvehicle Fuselage and Wings Check for Crack by Using Vibrational Test |
| **WORKS AND PROCEDURES TO BE DONE IN THE PROJECT****(Put the item number on the left and write it in order)** |
| **Item**1. Literature survey for Modal Analysis.
2. Establish experimental model
3. Measure the vibration response.
4. Analyze vibration signal in time and frequency domain
5. Obtain mode shapes and natural frequency.
6. Get condition result.
 |
| PROJECT AIMS |
| **Item**1. Determining the natural frequency and the mode shapes of the structure are most essential engineering analyses for prevention to resonance phenomena.
2. With this nondestructive methods, integrity of the structure can be checked.
3. The students will establish test rig.
4. The students will provide the required hardware & software.
 |
|  |

|  |
| --- |
| **THE STUDENT TO WORK ON THE PROJECT** |
| Number | Name Surname | Signature |
| 1.2.3. |  |  |

|  |
| --- |
| **SUPERVISOR** |
| TitleAssist. Prof. Dr. | Name SurnameHikmet BAL | Signature |