**2023-2024 SEMESTER**

**MECHANICAL ENGINEERING DEPARTMENT**

**GRADUATION PROJECT PROPOSAL FORM**

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| **Lecture Code: MEC 400** | **Lecture Name: Graduation Project** |
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| **Project Title / Number of Students:** | Evaluate the Performance of a Beam Manufactured by Conventinal Method vs AM. |
| **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 about vibration response of continuous system.
2. Create CAD model and export to Simulink model.
3. Get impulse response, mode shape and frequency.
4. Obtain mode shapes and frequencies.
5. Evaluate the performance of material.
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| PROJECT AIMS |
| **Item**1. Nowadays, producing many machine elements with Additive manufacturing technics is so popular. However, using machine part which produced by AM, instead of a part produced by traditional manufactured technics is require to fulfill necessary performance. Hence dynamics tests is necessary for the part manufactured with AM.
2. The students will produce part, and establish test rig or Simulink model.
3. The students will provide the required hardware & software, and analyze result.
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| **THE STUDENT TO WORK ON THE PROJECT** |
| Number | Name Surname | Signature |
| 1.2.3. |  |  |

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