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Açıklama otomatik olarak oluşturuldu

OSTİM TECHNICAL UNIVERSITY

**2023-2024 SEMESTER**

**GRADUATION PROJECT PROPOSAL FORM FOR MECHANICAL ENGINEERING DEPARTMENT**

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| **Lecture Code: MEC 400** | **Lecture Name: Graduation Project** | | |
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| **Project Title / Number of Students:** | **Effect of nano-Al2O3 additions to CFRPs on mechanical and fractural behavior** / 1 student |
| **WORKS AND PROCEDURE TO BE DONE IN THE PROJECT**  **(Put the item number on the left and write it in order)** | |
| **Item**   1. Literature review on the effect of nano-additions on mechanical behavior of carbon fiber reinforced epoxy composites (CFRPs) will be searched. 2. Mechanical/physical properties like tensile/flexural strength/hardness and density of CFRP composites will be calculated. 3. Tensile/Flexural properties of the composites will be measured with according to ASTM D 3039, ASTM D 790 standard and determined at room temperature. 4. Fracture surfaces of CFRP composites will be examined under SEM/AFM images. 5. XRD analysis will be done to see the atomic structure and its defects. | |
| PROJECT AIMS | |
| **Item**   1. To understanding the characteristics of matrix/fiber and nano-reinforcement. 2. To investigate the mechanical (tensile/flexural) and physical properties. 3. To find out which types of fracture mechanics are dominated, and measured the elastic modulus and strength properties. | |

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| **THE STUDENT TO WORK ON THE PROJECT** | | |
| Number | Name Surname | Signature |
| 1.  2. |  |  |

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| **SUPERVISOR** | | |
| Title  Prof.Dr. | Name Surname  Yusuf ŞAHIN | Signature  ysahin |