**DESIGN PROJECT PROPOSAL FORM**

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| **Academic Year** | **2024 -2025** | **Semester** | | Fall Spring X |
| **Project Type** | **Research** | | **Application** | |
| ME 411 Thermal & Fluid Design | | ME 412 Thermal & Fluid Design | |
| ME 413 Mechanical Design | | X ME 414 Mechanical Design | |
| ME 415 Robotics & Control Design | | ME 416 Robotics & Control Design | |
| **Advisors** | Prof. Dr. Kutlay SEVER | | | |

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| **Project Title** | Production of Biocomposites from Agricultural Wastes | | |
| **Purpose and Scope** | Biocomposites producing from renewable resources provide benefits to companies, natural environment and end-customers due to dwindling petroleum resources. Composites made of renewable materials have been increasingly used in interior and exterior car body parts. Similar components are used as trim parts in dashboards, door panels, seat cushions, backrests and cabin linings. In recent years there has been increasing interest in the replacement of fiberglass in reinforced plastic composites by natural plant fibers such as jute, flax, hemp, sisal and ramie.  Biocomposites were manufactured by using a composite production process. The composites will have content varying from 5 wt % to 20 wt %. The composites were characterized by flexural, tensile, and dynamic mechanical testing. | | |
| **Work Packages** | * Literatur survey * Grinding of agricultural waste * Composite production * Composite testing * Conclusion and Recommendations | | |
| **Max Number of Students** | 3 | | |
| **Student info** | Student ID | Name/Surname | Signature |
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