**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** | Evaluation of Mechanical Properties of Composite Bonding Joints with Alternative Adhesives |
| **Purpose and Scope** | The purpose of this study is to investigate the mechanical properties of composite bonding joints formed using alternative adhesives. The research aims to evaluate the performance of different adhesive materials under mechanical loading conditions to determine their suitability for industrial applications. By analyzing the mechanical behavior of these joints, the study seeks to provide insights into the potential of alternative adhesives. This research focuses on the following:1. Selection of alternative adhesives with potential applications in composite bonding.
2. Fabrication of composite bonding joints using selected adhesives.
3. Experimental determination of mechanical properties, including, lapshear strength and flexural strength etc
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| **Work Packages** | * Literatur survey
* Adhesive selection
* Fabrication of Composite Bonding Joints
* Mechanical Testing
* Conclusion and Recommendations
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| **Max Number of Students** | 3 |
| **Student info** | Student ID | Name/Surname | Signature |
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