

Summer (June-July'2025) Internship by ME Department , JGEC

Dated : 29-May-2025

<u>Sl No.</u>	<u>Faculty</u>	<u>Proposed Project Titles</u>
1.	Prof. Amitava Roy, Prof. Asim Mahapatra & Prof. Ayan Pramanick	1. Project Title (Manufacturing): “Machining Characterization and Multi performance optimization in machining of alloy steel using coated carbide tool.” 2. Project Title (Manufacturing): “Additive manufacturing of Polymer material using 3D Printing.” 3. Project title (Manufacturing): “Sustainability issues of manufacturing organization.”
2.	Prof. Arijit Kundu & Prof. Md. Naim Hossain	1. Project Title (Refrigeration): "Effect of Tube Orientation Under Varying Heat Flux on Evaporative Boiling Heat Transfer Using Ansys". 2. Project Title (Refrigeration): "CFD Investigation of Boiling and Condensation Heat Transfer in Horizontal Tubes Using Open FOAM". 3. Project Title (Renewable Energy): "Performance Analysis of an Earth-Air Heat Exchanger and Ground Heat Exchanger under Varying Soil Moisture Conditions for Passive Cooling in Hot Climates". 4. Project Title (Renewable Energy): "Experimental and Numerical Study of a Solar Flat Plate Collector with Varying Flow Rates". 5. Project Title (Renewable Energy): "CFD Investigation of Solar Air Heater with and without Internal Baffles".
3.	Prof. Subhendu Pal & Prof. Tanmoy Majhi	1. Application of MATLAB in Solid Mechanics. 2. Application of MATLAB in Heat Transfer.
4.	Prof. Satyajit Das Karmakar & Prof. Pritam Dey	1. Project Title (Renewable Energy): “Comparative CFD Study of Savonius vs. Darrieus VAWTs Using ANSYS”. 2. Project Title (Renewable Energy): “Integration of PHS with Wind Energy: System-Level Modelling and Efficiency Estimation”. 3. Project Title (Renewable Energy): “Thermodynamic Assessment of a Pumped Hydro System: Entropy and Exergy Analysis”.
5.	Prof. Asim Mahapatra, Prof. Wasim Akram & Prof. Debdut Maji	1. Numerical Simulation of Various Electrophoretic Techniques (CZE, ITP, FASS, etc) Using Open-Source Tools. 2. Harnessing Solar Energy Using Phase Change Materials. 3. Design of Conveyors.