<table>
<tr><th>VERTICAL 1
Space Technology</th><th>VERTICAL 2
Computational Engineering</th><th>VERTICAL 3
Aerodynamics and Propulsion</th><th>VERTICAL 4
Aerospace Structures</th></tr>
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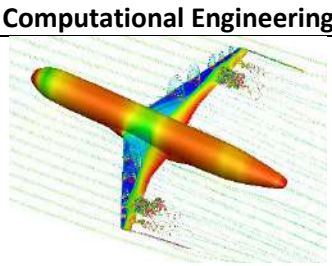
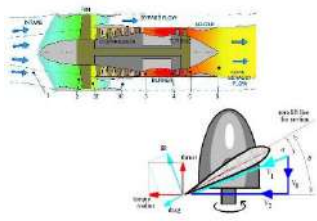
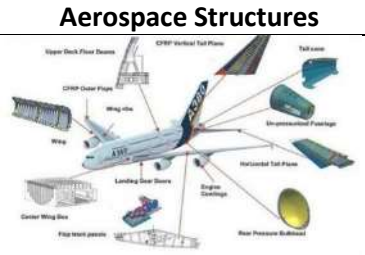
<td>
• Cryogenics
• High Temperature Gas Dynamics
• Launch Vehicle Aerodynamics
• Orbital Mechanics
• Launch Vehicle Configuration Design
• Space Missions</td>
<td> 
• Numerical Methods in Fluid Dynamics
• Computational Heat Transfer
• Finite Element Methods
• Computational Fluid Dynamics
• Computed Aided Design and Analysis
• Grid Generation Techniques</td>
<td> 
• Experimental Aerodynamics
• High Speed Aerodynamics
• Industrial Aerodynamics
• Rocket Propulsion
• Advanced Propulsion Systems
• Hypersonic Aerodynamics</td>
<td> 
• Fatigue and Fracture Mechanics
• Experimental Stress Analysis
• Composite Materials and Structures
• Additive Manufacturing
• Non Desteuctive Testing and Evaluation
• Aerospace Materials</td>
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<tr><th>VERTICAL 5
Satellite Technology</th><th>VERTICAL 6
Diversified courses group-1</th><th>VERTICAL 7
Diversified courses group-2</th><th></th></tr>
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<td>
• Spacecraft Power Systems
• Satellite Navigation and Control
• Spacecraft Sensors and Instrumentation
• Spacecraft Systems Engineering
• Satellite Architecture
• Spacecraft Dymanics</td>
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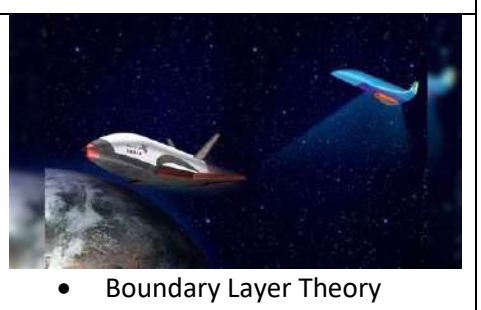
• High Temperature Materials
• Machining and Precision Manufacturing
• Design of Non-Air Breathing Engines
• Manufacturing Processes
• Spacecraft Structures
• Smart Materials</td>
<td> 
• Boundary Layer Theory
• Theory of Elasticity
• Structural Dynamics
• Heat Transfer
• Advanced Vehicle Technology
• Missile Guidance and Control</td>
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