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| No. | **Current Projects (more than one year to complete)** |
| 1 | 3D printing continuous carbon fibre reinforced polymeric composites |
| 2 | CFD Modelling of Wake Dynamics for Flexible Bluff Body  |
| 3 | Design and characterise acoustic metamaterials in water-like media |
| 4 | Design and Testing of a Morphing Wing |
| 5 | Fatigue Mechanical behaviour of Additively Manufactured Aluminium Alloy |
| 6 | Heat Transfer Enhancement in Supercritical Hydrocarbon Heat Exchanger for Hypersonic Vehicles |
| 7 | High-Fidelity Analysis and Design Optimisation of Cusped Field Thrusters for Micro-Satellites  |
| 8 | Low Speed Aerodynamics and Static Stability Analysis of Hypersonic Vehicle Using Data Driven Proper Orthogonal Decomposition and Dynamic Mode Decomposition Techniques  |
| 9 | Next Generation Ground Station for Low Earth Orbit Satellite Constellations |
| 10 | Novel Energy Storage Technology using Multi-functional Textiles.  |
| 11 | Numerical Investigation of Shock-Induced Phenomena on Transonic Aerofoils |
| 12 | Researching into the fundamentals of carbon fibre braiding - Towards the development of improved braids for commercial aircraft structures |
| 13 | Shape sensing and load reconstruction of wing structures |
| 14 | Using Aerodynamic Reduced-Order Model to improve the Fidelity of Data Driven Aeroelastic Predictions |