SYLLABUS FOR M.TECH AEROSPACE

- Introduction to Space Technology
- Engineering Aerodynamics and Flight Mechanics
- Elements of Gas Dynamics and Propulsion
- Airplane & Aerospace Structures
- Aerodynamic Design
- Structural Design
- Object Oriented Programming
- Computational Aerodynamics
- Advanced Flight Mechanics
- Transonic Aerodynamics
- Helicopter Aerodynamics
- Flight Testing and Performance Reduction
- Rocket Propulsion
- Theory and Design of Gas Turbines
- Advanced Engineering Analysis
- Acoustic Instabilities in Aerospace Propulsion
- System Simulation and Process Optimization
- Hypersonic Flow Theory
- Combustion, Explosion and Detonation
- Multiphase Flow
- Hypersonic Air breathing Propulsion
- Transport Processes in Reacting Flows
- Approximate Methods in Structural Analysis
- Thermal Stress Analysis
- Composite Structures
- Finite Element Analysis
- Mechanics of Damage Tolerance
- Mechatronics Design
- Aero elasticity
- Dynamics of Elastic Systems