

Topics to be covered

Type

1	MATLAB installation and GUI Introduction	
2	Arrays and Array Manipulation and Plot basics and methods	Programming
3	Array manipulation and Function file handling	Programming
4	Control statements in MATLAB For loop, if else	Programming
5	Control statements in MATLAB For loop, if else	Programming

Week end assignments on MATLAB

1	Solving Odes' USING Rk4 METHOD in MATLAB	Programming
2	Solving an Optimization problem in MATLAB	Programming
3	Performing Curve fitting in MATLAB	Programming
4	Introduction to SIMULINK modelling and basic blocks	Programming
5	Transfer function and input signals	Programming

Study and research based Assignment

1	Aerodynamic forces evaluation	Programming
2	Thrust available and thrust required concept and programming	Programming
3	ROC of an aircraft	Programming
4	Take off performance of an aircraft	Programming
5	V-N diagram	Programming

1	Longitudinal static stability and Neutral point	Programming
2	Longitudinal directional stability	Programming
3	Simulink building blocks Aerospace block set	Programming
4	Aerospace block set -2	Programming
5	Last session	