

**DEPARTMENT OF  
AEROSPACE ENGINEERING  
(School of Mechanical Sciences)**

**Curriculum Details  
MTech – Aerospace  
2014-16**

## CURRICULUM

### M-Tech Aerospace Engineering - 2014 Batch

#### REVISED COURSE COMPONENTS

**Table -1**

Course Code	PROGRAM CORE	Credits
	Name of the Course	
14MA3004	Advanced Calculus and Numerical Methods	3:0:0
14AE3001	Advanced Solid Mechanics	3:0:0
14AE3002	Advanced Computational Fluid Dynamics	3:0:0
14AE3003	Thermodynamics & Heat Transfer	3:0:0
14AE3004	Flight Performance and Dynamics	3:0:0
14AE3006	Advanced Aerodynamics	3:0:0
14AE3007	Advanced Propulsion	3:0:0
14AE3008	Aerospace Structural Analysis	3:0:0
14AE3009	Advanced Avionics	3:0:0
14AE3010	Advanced Computational Fluid Dynamics Lab	0:0:1
14AE3011	Advanced Aerodynamics Lab	0:0:2
14AE3012	Structural Analysis Lab	0:0:2
14AE3013	Aircraft Modelling Lab	0:0:1
14AE3014	Aero Propulsion Lab	0:0:2
14AE3005	Orbital Space Dynamics	3:0:0
	<b>Total Credits</b>	<b>38</b>
14VE3001/3002	Value Education III / IV	2:0:0
PSP3998	Part Semester Project	12
FSP3999	Full Semester Project	20
	<b>Total</b>	<b>72</b>

**Table -2**

Sub. Code	PROFESSIONAL ELECTIVES	Credits
14AE3015	Elements of Aerospace Engineering	3:0:0
14CE3006	Finite Elements Methods in Engineering	3:0:0
14ME3021	Composite Materials	3:0:0
15AE3001	Aero-elastic Theory	3:0:0
15AE3002	Boundary Layer Theory	3:0:0

15AE3003	Theory of Vibration	3:0:0
15AE3004	Aircraft Design	3:0:0
15AE3005	Flight Control System	3:0:0
15AE3006	Rocket Dynamics	3:0:0
15AE3007	Advanced Aircraft systems	3:0:0
15AE3008	Unmanned Aerial Systems	3:0:0

**Total Credits requirement: 82**