AEROSPACE ENGINEERING (B.Tech.)

	COURSE CURRICE	ULUM	I FOI	R TH	E NEW	PROGRA	MME (B.Tech) w.e.f. 2007 BATCH						
	Semester I						Semester – II						
Course code	Course Name	Credit Structure				Course Code	Course Name		Credit Structure				
		L	T	P	C	MA 106	Linear Algebra and		T	P	C		
CH 103+	Chemistry	2	1	0	6	MA 108	Ordinary Differential Equations I	3	1	0	8		
CS 101	Computer Programming	2	0	2	6	CH 103+	Chemistry	2	1	0	6		
HS 101	Economics	3	0	0	6	PH 103*	Electricity and Magnetism	3	0	0	6		
MA 105	Calculus	3	1	0	8	PH 105*	Modern Physics	2	1	0	6		
PH 103*	Electricity and Magnetism	2	1	0	6	AE 152	Introduction to Aerospace Engg	3	0	2	8		
PH 105*	Modern Physics	2	1	0	6	IC 102	Data Analysis and Interpretations	2	1	0	6		
CH 117+	Chemistry Lab	0	0	3	3	CH 117*	Chemistry Lab.	0	0	3	3		
ME 113*	Workshop Practice	0	1	3	5	ME 113+	Workshop Practice	0	1	3	5		
ME 119*	Engineering Graphics and Drawing	1	0	3	5	ME 119+	Engineering Graphics and Drawing	0	1	3	5		
PH 117+	Physics Lab	0	0	3	3	PH 117*	Physics Lab.	0	0	3	3		
NC 101#	National Cadet Corps (NCC)	0	0	0	P/NP	NC 102#	National Cadet Corps (NCC)	0	0	0	P/NP		
NO 101#	National Sports Organization (NSO)	0	0	0	P/NP	NO 102#	National Sports Organization (NSO)	0	0	0	P/NP		
NS 101#	National Service Scheme (NSS)	0	0	0	P/NP	NS 102#	National Service Scheme (NSS)	0	0	0	P/NP		
* Any one of these two courses and any one of these Lab courses only for D3 D4 + Only for D1 D2 # Any one of these three P/NP courses						* Any one of these two courses and any one of these Lab courses only for D1 D2 + Only for D3 D4 # Any one of these three P/NP courses					_1		

AEROSPACE ENGINEERING

	COURSE CURRIC	ULUM	FOR	THE	NEV	V PROGRA	MME (B.Tech) w.e.f. 2007 BATCH					
	Semester III						Semester – IV					
Course code	Course Name	rse Name Credit Structure					Course Name		Credit Structure			
		L	T	P	C			L	T	P	C	
MA 207	Differential Equations II	3	1	0	4	MA 214	Introduction to Numerical Analysis	3	1	0	8	
EE 101	Introduction to Electrical and Electronics Circuits	3	1	0	8	AE 214	Thermodynamics	2	1	0	6	
AE 207	Introduction to Engineering Design	2	0	2	6	AE 216	Fluid Mechanics	3	1	0	8	
AE 209	Solid Mechanics	3	1	0	8	AE 220	Aerospace Structural Mechanics	3	1	0	8	
IC 211	Experimentation and Measurement Laboratory	0	0.5	3	4	AE 230	Modeling and Simulation Laboratory	1.5	0	2	5	
AE 215	Aerospace Measurements Laboratory	1	0	2	4							
	Total	12	3.5	7	34		Total	12.5	4	2	35	
COURSE	E FOR HONOURS REQUIREMENT					COURSE	E FOR HONOURS REQUIREMENT					
AE 219	Supervised Learning				6	AE 219	Supervised Learning / Honors Elective				6	
COURSE	ES FOR MINOR REQUIREMENT					COURSI	ES FOR MINOR REQUIREMENT					
AE 209	Solid Mechanics	3	1	0	8	AE 214	Thermodynamics	2	1	0	6	
						AE 216	Fluid Mechanics	3	1	0	8	
						AE 152	Introduction to Aerospace Engg.	3	0	2	8	

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	Semester V				Semester – VI								
Course code	Course Name	Cı	redit S	Struct	ure	Course Code	Course Name		Credit Structure				
		L	T	P	C			L	T	P	C		
AE 308	Control Theory	2	1	0	6	AE 305	Flight Mechanics	2	1	0	6		
AE 329	Propulsion	3	1	0	8	AE 415	Spaceflight Mechanics	2	1	0	6		
AE 333	Aerodynamics	2	1	0	6	AE 310	Engineering Design Optimization	2	1	0	6		
HS 301/ HS 303/ HS 305/ HS 307	Philosophy/ Psychology/ Literature/ Sociology	3	0	0	6	AE 316	Aircraft Propulsion Laboratory	1	0	3	5		
AE 411	Controls Systems Laboratory	0	0	3	3	AE 312	Aerodynamics Laboratory	1	0	3	5		
AE 314	Structures Laboratory	1	0	3	5								
	Total	11	3	6	34		Total	8	3	6	28		
COURSE	FOR HONOURS REQUIREMENT				1	COURSE	FOR HONOURS REQUIREMENT		1				
AE 335/ AE 493	Supervised Learning / Honors Elective / BTP-I				6 6 6	6 Honors Elective/					6 6 6		
						AE 494	BTP-II				12		
COURSE	COURSE FOR MINOR REQUIREMENT						COURSE FOR MINOR REQUIREMENT						
AE 329	Propulsion	3	1	0	8	AE 305	Flight Mechanics	2	1	0	6		
AE 333	Aerodynamics	2	1	0	6	AE 415	Spaceflight Mechanics	2	1	0	6		

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	Semester VII			Semester – VIII								
Course code	Course Name	C	redit S	Structi	ure	Course Code	Course Name	Credit Structure				
		L	T	P	C			L	T	P	C	
AE 332	Aircraft Design	2	1	0	6	ES 200 And HS 200	Environmental Studies: Science and Engg And Environmental Studies	3	0	0	3	
	Institute Elective I	2	1	0	6	AE 417	Aircraft Design Laboratory	1	0	2	4	
	Department Elective	2	1	0	6		Institute Elective II	2	1	0	6	
AE 419	Department Elective / Supervised Learning				6		Department Elective	2	1	0	6	
						AE 419	Department Elective / Supervised Learning				6	
					24						28	
COURSE	FOR HONOURS REQUIREMENT	·				COURSE I	FOR HONOURS REQUIREMENT					
AE 419 AE 493	Supervised Learning / Honors Elective / BTP-I				6 6 6	AE 419/ AE 493	Supervised Learning / Honors Elective / BTP-I				6 6 6	
AE 494	BTP-II				12	AE 494	BTP-II				12	
COURSE	COURSE FOR MINOR REQUIREMENT						COURSE FOR MINOR REQUIREMENT					
AE 332	Aircraft Design	2	1	0	6							

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C	COURSE CURRICULUM FOR THE NEW PROGRAMME (B.Tech./Dual Degree and 5yr. Int. M.Sc.) w.e.f. 2007 BATCH									