SCHEME OF
UNDERGRADUATE DEGREE COURSE

Aeronautical Engineering

Effective for the students admitted in year 2021-22 and onwards.

B.Tech. : Aeronautical Engineering
3rd Year - V Semester

SN	Category	Course Code	Course Title	Hours			Marks			Credit
				L	T	P	IA	ETE	Total	
THEORY										
1	DC	5AR4-01	Introduction to Vibration and Aeroelasticity	3	0	0	30	70	**100**	**3**
2		5AR4-02	Aerodynamics - II	3	1	0	30	70	**100**	**4**
3		5AR4-03	Aircraft Structures	3	1	0	30	70	**100**	**4**
4		5AR4-04	Aircraft Systems	3	0	0	30	70	**100**	**3**
5	DE-I	5AR5-11	Space Mechanics	2	0	0	30	70	**100**	**2**
		5AR5-12	Aircraft General Maintenance Practices							
		5AR5-13	Fatigue and Fracture							
6	DE-II	5AR5-14	Introduction to Aerospace Propulsion	2	0	0	30	70	**100**	**2**
		5AR5-15	Civil Aviation Requirements-I							
		5AR5-16	Non-Destructive Testing and Evaluation							
			Sub Total	**16**	**2**	**0**	**180**	**420**	**600**	**18**
PRACTICAL & SESSIONAL										
7	DC	5AR4-20	Aerodynamics Lab	0	0	2	60	40	**100**	**1**
8		5AR4-21	Aircraft Structures Lab	0	0	2	60	40	**100**	**1**
9		5AR4-22	Aircraft System Lab	0	0	2	60	40	**100**	**1**
10		5AR4-23	Computer Aided Simulation Lab	0	0	2	60	40	**100**	**1**
11	UI	5AR7-30	Professional Training	0	0	2*	60	40	**100**	**3**
12	CCA	5AR8-00	SODECA/NCC/NSS/ ANANDAM/IPR	-	-	-	-	100	**100**	**1**
			Sub- Total	**0**	**0**	**10**	**300**	**300**	**600**	**8**
			TOTAL OF V SEMESTER	**16**	**2**	**10**	**480**	**720**	**1200**	**26**

L = Lecture, **T** = Tutorial, P = Practical, IA=Internal Assessment, ETE=End Term Exam, **Cr**=Credits

***for calculation of contact hours

B.Tech. : Aeronautical Engineering
3rd Year - VI Semester

SN	Category	Course Code	Course Title	Hours			Marks			Credit
				L	T	P	IA	ETE	Total	
			THEORY							
1	DC	6AR4-01	Composite Materials	2	0	0	30	70	100	2
2		6AR4-02	Aircraft Performance	3	0	0	30	70	100	3
3		6AR4-03	Aircraft Stability and Control	3	0	0	30	70	100	3
4		6AR4-04	Elements of Avionics	3	0	0	30	70	100	3
5		6AR4-05	Helicopter Theory	3	0	0	30	70	100	3
6	DE	6AR5-11	Aerospace Heat Transfer	2	0	0	30	70	100	2
		6AR5-12	Civil Aviation Requirements -II							
		6AR5-13	Aircraft Instrumentation and Control Engineering							
			Sub Total	16	0	0	180	420	600	16
			PRACTICAL & SESSIONAL							
7	DC	6AR4-20	Composite Materials Lab	0	0	2	60	40	100	1
8		6AR4-21	Aircraft Electrical System Lab	0	0	2	60	40	100	1
9		6AR4-22	Aircraft Instrument System Lab	0	0	2	60	40	100	1
10		6AR4-23	Aircraft Radio Navigation Lab	0	0	2	60	40	100	1
11	UI	6AR7-50	Minor Project	0	0	4*	60	40	100	2
12	CCA	6AR8-00	SODECA/NCC/NSS/ANANDAM/IPR	-	-	-	-	100	100	2
			Sub- Total	0	0	12	300	260	560	8
			TOTAL OF VI SEMESTER	16	0	12	480	680	1160	24

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*for calculation of contact hours

B.Tech. : Aeronautical Engineering
4th Year - VII Semester

SN	Category	Course Code	Course Title	Hours			Marks			Credit
				L	T	P	IA	ETE	Total	
THEORY										
1	DC	7AR4-01	Unmanned Aerial Vehicle (UAV)	3	0	0	30	70	**100**	**3**
2	DE	7AR5-11	Cryogenics	2	0	0	30	70	**100**	**2**
		7AR5-12	Airframe and System Maintenance Practices							
		7AR5-13	Airline and Airport Management							
3	UE	7AG6-60	University Elective-I	3	0	0	30	70	**100**	**3**
			Sub Total	**8**	**0**	**0**	**90**	**210**	**300**	**8**
PRACTICAL & SESSIONAL										
4	DC	7AR4-20	CFD Lab	0	0	2	60	40	**100**	**1**
5	UI	7AR7-30	Industrial Training	0	0	2*	60	40	**100**	**3**
6	UI	7AR7-50	Major Project - I	0	0	2*	60	40	**100**	**2**
7	CCA	7AR8-00	SODECA/NCC/NSS/ ANANDAM/IPR	-	-	-	-	100	**100**	**1**
			Sub- Total	**0**	**0**	**6**	**180**	**220**	**400**	**7**
			TOTAL OF VII SEMESTER	**8**	**0**	**6**	**270**	**430**	**700**	**15**

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* for calculation of contact hours

B.Tech. : Aeronautical Engineering
4th Year - VIII Semester

				THEORY						
SN	Category	Course Code	Course Title	Hours			Marks			Credit
				L	T	P	IA	ETE	Total	
1	UE	8AR6-60	University Elective-II	3	0	0	30	70	**100**	**3**
			Sub Total	**3**	**0**	**0**	**30**	**70**	**100**	**3**
			PRACTICAL & SESSIONAL							
2	UI	8AR7-50	Major Project - II	0	0	4*	60	40	**100**	**4**
3	UI	8AR7-40	Seminar	0	0	2*	60	40	**100**	**2**
4	CCA	8AR8-00	SODECA/NCC/NSS/ANANDAM/IPR	-	-	-	-	100	**100**	**2**
			Sub- Total	**0**	**0**	**6**	**120**	**180**	**300**	**8**
			TOTAL OF VIII SEMESTER	**3**	**0**	**6**	**150**	**250**	**400**	**11**

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*for calculation of contact hours