Sanjay Ghodawat University

Kolhapur



School of Engineering and Technology

Department of Aerospace Engineering

M. Tech. Aerospace Engineering

Curriculum Structure (R24)

Semester I-IV

Programme Structure for M. Tech. Aerospace Engineering First Year(R24)
Semester I: Teaching Scheme

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		Th	Pr	Tu	Th	Pr	Tu	Total credits
P69PC101	Finite Element Method	3	-	-	3	-	-	3
P69PC102	Rocket Propulsion	3	-	-	3	-	-	3
P69PC103	Flight Performance	3	-	-	3	-	-	3
P69PE1XX	Program Specific Elective I	3	-	-	3	-	-	3
P01RM101	Research Methodology	2	-	-	2	-	-	2
PXXOE1XX	Open/Multidisciplinary Elective I	2	-	-	2	-	-	2
P69VS101	Software proficiency I	-	4	-	-	2	-	2
P69PC104	Flight Performance Lab	-	4	-	-	2	-	2
	Total	**16**	**08**	**-**	**16**	**4**	**-**	**20**

Th: Theory, Pr: Practical, Tu: Tutorial

Programme Structure for M. Tech. Aerospace Engineering First Year
Semester I: Evaluation Scheme

Course Code	Course Name	*Theory Marks*					*Practical Marks*		Total
		Internal Assessment				SEE	Term work	Practical Oral/POE	
		T1	T2	FET	Total				
P69PC101	Finite Element Method	10	10	5	25	50	-	-	75
P69PC102	Rocket Propulsion	10	10	5	25	50	-	-	75
P69PC103	Flight Performance	10	10	5	25	50	-	-	75
P69PE1XX	Program Specific Elective I	10	10	5	25	50	-	-	75
P01RM101	Research Methodology	-	10	5	15	35	-	-	50
PXXOE1XX	Open/Multidisciplinary Elective I	-	10	5	15	35	-	-	50
P69VS101	Software proficiency I	-	-	-	-	-	50	-	50
P69PC104	Flight Performance Lab	-	-	-	-	-	25	25	50

FET – Faculty evaluation for Theory, T1, T2, Continuous Assessment Test, SEE - Semester End Examination

Program Specific Elective		
I	P69PE101	Advanced Aerodynamics
	P69PE102	Satellite Communications

Programme Structure for M. Tech. Aerospace Engineering First Year (R24)

Semester II: Teaching Scheme

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		Th	Pr	Tu	Th	Pr	Tu	Total credits
P69PC201	Computational Fluid Dynamics	3	-	-	3	-	-	3
P69PC202	Hypersonic Aerodynamics	3	-	-	3	-	-	3
P69PC203	Aerospace Structure	3	-	-	3	-	-	3
P69PE2XX	Program Specific Elective II	3	-	-	3	-	-	3
P01RM201	Research Publications and Ethics	2	-	-	2	-	-	2
PXXOE2XX	Open/Multidisciplinary Elective II	2	-	-	2	-	-	2
P69VS201	Software proficiency II	-	4	-	-	2	-	2
P69PC204	Hypersonic Aerodynamic Lab	-	4	-	-	2	-	2
	Total	**16**	**08**	**-**	**16**	**4**	**-**	**20**

Th: Theory, Pr: Practical, Tu: Tutorial

Programme Structure for M. Tech. Aerospace Engineering First Year
Semester II: Evaluation Scheme

Course Code	Course Name	*Theory Marks*					*Practical Marks*		Total
		Internal Assessment				SEE	Term work	Practical Oral/POE	
		T1	T2	FET	Total				
P69PC201	Computational Fluid Dynamics	10	10	5	25	50	-	-	75
P69PC202	Hypersonic Aerodynamics	10	10	5	25	50	-	-	75
P69PC203	Aerospace Structure	10	10	5	25	50	-	-	75
P69PE2XX	Program Specific Elective II	10	10	5	25	50	-	-	75
P01RM201	Research Publications and Ethics	-	10	5	15	35	-	-	50
PXXOE2XX	Open/Multidisciplinary Elective II	-	10	5	15	35	-	-	50
P69VS201	Software proficiency II	-	-	-	-	-	50	-	50
P69PC204	Hypersonic Aerodynamic Lab	-	-	-	-	-	25	25	50

FET – Faculty evaluation for Theory, T1, T2, Continuous Assessment Test, Term, SEE - Semester End Examination

Exit Option: Students who exit at the end of first year shall be awarded a PG Diploma after successful completion of first year with additional 4 credits earned through industry internship/field work/ vocational training/generic course/(s).

Program Specific Elective		
II	P69PE201	Propellant Technology
	P69PE202	Boundary Layer Theory

Programme Structure for M. Tech. Aerospace Engineering Second Year (R24)
Semester III: Teaching Scheme

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		Th	Pr	Tu	Th	Pr	Tu	Total credits
P69PC301	MOOC I	3	-	-	3	-	-	3
P69PC302	MOOC II	3	-	-	3	-	-	3
P69PR301	Dissertation Phase I	-	-	-	-	6	-	6
P69OT301	Industry Internship	-	-	-	-	8	-	8
	Total	**6**	**-**	**-**	**06**	**14**	**-**	**20**

Th: Theory, Pr: Practical, Tu: Tutorial

Programme Structure for M. Tech. Aerospace Engineering Second Year
Semester III: Evaluation Scheme

Course Code	Course Name	*Theory Marks*					*Practical Marks*		Total
		Internal Assessment				SEE	Term work	Practical Oral/POE	
		T1	T2	FET	Total				
P69PC301	MOOC I	-	-	-	25	50		-	75
P69PC302	MOOC II	-	-	-	25	50		-	75
P69PR301	Dissertation Phase I	-	-	-	-	-	100	50	150
P69OT301	Industry Internship	-	-	-	-	-	150	50	200

FET – Faculty evaluation for Theory, T1, T2, Continuous Assessment Test, SEE - Semester End Examination

OR

Programme Structure for M. Tech. Aerospace Engineering Second Year (R24)

Semester III: Teaching Scheme

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		Th	Pr	Tu	Th	Pr	Tu	Total credits
P69RP301	Dissertation Phase I – Research	-	-	-	-	20	-	20
	Total	**-**	**-**	**-**	**-**	**20**	**-**	**20**

Th: Theory, Pr: Practical, Tu: Tutorial

Programme Structure for M. Tech. Aerospace Engineering Second Year
Semester III: Evaluation Scheme

Course Code	Course Name	*Theory Marks*					*Practical Marks*		Total
		Internal Assessment				SEE	Term work	Practical Oral/POE	
		T1	T2	FET	Total				
P69RP301	Dissertation Phase I – Research	-	-	-	-	-	350	150	500

FET – Faculty evaluation for Theory, T1, T2, Continuous Assessment Test, SEE - Semester End Examination

Programme Structure for M. Tech. Aerospace Engineering Second Year (R24)

Semester IV: Teaching Scheme

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		Th	Pr	Tu	Th	Pr	Tu	Total credits
P69PR401	Dissertation Phase II		-	-	-	20	-	20
	Total	**-**	**-**	**-**	**-**	**20**	**-**	**20**

Th: Theory, Pr: Practical, Tu: Tutorial

Programme Structure for M. Tech. Aerospace Engineering Second Year
Semester IV: Evaluation Scheme

Course Code	Course Name	*Theory Marks*					*Practical Marks*		Total
		Internal Assessment				SEE	Term work	Practical Oral/POE	
		T1	T2	FET	Total				
P69PR401	Dissertation Phase II					-	350	150	500

FET – Faculty evaluation for Theory, T1, T2, Continuous Assessment Test, SEE - Semester End Examination

OR

Programme Structure for M. Tech. Aerospace Engineering Second Year (R24)
Semester IV: Teaching Scheme

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		Th	Pr	Tu	Th	Pr	Tu	Total credits
P69RP401	Dissertation Phase II – Research		-	-	-	20	-	20
	Total	**-**	**-**	**-**	**-**	**20**	**-**	**20**

Th: Theory, Pr: Practical, Tu: Tutorial

Programme Structure for M. Tech. Aerospace Engineering Second Year
Semester IV: Evaluation Scheme

Course Code	Course Name	*Theory Marks*					*Practical Marks*		Total
		Internal Assessment				SEE	Term work	Practical Oral/POE	
		T1	T2	FET	Total				
P69RP401	Dissertation Phase II - Research					-	350	150	500

FET – Faculty evaluation for Theory, T1, T2, Continuous Assessment Test, SEE - Semester End Examination