

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Aeronautical Engineering (01)**  
**BE 1st To 8th Semester Exam Scheme & Subject Code**

**EVALUATION SCHEME**

University Exam (Theory) (E)		University Exam (Practical) (E)		Continuous Evaluation Process(M)		Practical (I)	
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
70	23	X	50% of X	20	8	10	4
				30	12	X	50% of X

**NOTE :**

X = Marks of the Particular Subject.

Continuous Evaluation(M) 20/8 and Practical (I) 10/4 scheme apply up to April 2009

Continuous Evaluation(M) 30/12 and Practical X/ 50% of X scheme apply from April 2009 onward.

University Exam (Practical) (E) Component is applicable only in 7th & 8th Semester.

**1st Year**

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory)(E)	University Exam (Practical)(E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
110001	Chemistry	3	0	2	5	70	—	30	50	150	1
110002	Communication Skills	1	0	2	3	70	—	30	50	150	1
110003	Computer Programming & Utilization (Revised)	2	0	4	6	70	—	30	50	150	1
110004	Elements of Civil Engineering (Revised)	4	0	2	6	70	—	30	50	150	1
110005	Elements of Electrical Engineering	4	0	2	6	70	—	30	50	150	1
110006	Elements of Mechanical Engineering	4	0	2	6	70	—	30	50	150	1
110007	Environmental Studies	3	0	0	3	70	—	30	50	150	1
110008 OR 110014	Maths-I (entry year 2008-10 having backlog)OR Calculus (entry year 2011-12)	3	2	0	5	70	—	30	50	150	1

110009 OR 110015	Maths-II (entry year 2008-10 having backlog) OR Vector Calculus and Linear Algebra (entry year 2011-12)	3	2	0	5	70	—	30	50	150	1
110010	Mechanics of Solids (Revised)	3	0	2	5	70	—	30	50	150	1
110011	Physics	3	0	2	5	70	—	30	50	150	1
110012	Workshop	0	0	4	4	0	—	0	100	100	1
110013	Engineering Graphics	2	0	4	6	70	—	30	50	150	1
	<b>TOTAL</b>	<b>35</b>	<b>4</b>	<b>26</b>	<b>65</b>						

### Semester III

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
130001/ 130002	Mathematics-3 / Advanced Engineering Mathematics (New)	3	2	0	5	70	—	30	50	150	1
131901	Electrical Machines and Electronics	3	1	0	4	70	—	30	50	150	1
130101	Fluid Mechanics	3	0	2	5	70	—	30	50	150	1
130102	Chemistry for Aeronautical Engg.	4	0	1	5	70	—	30	50	150	1
130103	Analysis of Mechanism & Machine Elements	3	2	0	5	70	—	30	50	150	1
130104	Introduction of Profession	3	0	2	5	70	—	30	50	150	1
	<b>TOTAL</b>	<b>19</b>	<b>5</b>	<b>5</b>	<b>29</b>						

### Semester IV

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
140001	Mathematics-4	3	2	0	5	70	—	30	50	150	1
140002	Management-1	2	0	0	2	70	—	30	50	150	1
141903	Engineering Thermodynamics	4	1	0	5	70	—	30	50	150	1
140101	Aircraft Structure-1	3	1	0	4	70	—	30	50	150	1
140102	Aerodynamics-1	3	1	0	4	70	—	30	50	150	1
140103	Aircraft Systems And Instruments	4	1	0	5	70	—	30	50	150	1
140104	Institute Elective-1(Fundamentals Of Aeronautics)	4	0	2	6	70	—	30	50	150	1
	<b>TOTAL</b>	<b>23</b>	<b>6</b>	<b>2</b>	<b>31</b>						

**Semester V**

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
150001	Management - II	2	0	0	2	70	—	30	50	150	1
150101	Flight Mechanics	3	1	0	4	70	—	30	50	150	1
150102	Fundamentals of Turbo M/cs	3	1	0	4	70	—	30	50	150	1
150103	Aircraft Structure-II	3	0	2	5	70	—	30	50	150	1
150104	Computational Fluid Dynamics-1	3	0	2	5	70	—	30	50	150	1
150105	Operation & Maintenance of Aircraft	3	1	0	4	70	—	30	50	150	1
150106	Composite Materials and Smart Structures (Institute Elective - II)	4	0	2	6	70	—	30	50	150	1
	<b>TOTAL</b>	<b>21</b>	<b>3</b>	<b>6</b>	<b>30</b>						

**Semester VI**

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
160101	Aerodynamics-II	4	1	0	5	70	—	30	50	150	1
160102	Fundamentals of Jet Propulsion	4	1	0	5	70	—	30	50	150	1
160103	Vibration and Noise Control	3	0	2	5	70	—	30	50	150	1
160104	Basic Control Theory	3	0	2	5	70	—	30	50	150	1
160105	Computational Fluid Dynamics -II	3	0	2	5	70	—	30	50	150	1
160106	Avionics	3	0	2	5	70	—	30	50	150	1
	<b>TOTAL</b>	<b>20</b>	<b>2</b>	<b>8</b>	<b>30</b>						

**Semester VII**

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
170101	Aircraft Design - 1	4	0	2	6	70	30	30	20	150	1
170102	Theory of Heat Transfer	4	0	2	6	70	30	30	20	150	1
170103	Mechanics of Composite Materials	4	0	0	4	70	0	30	50	150	1
170104	Rocket & Missile Configurations Design	4	0	0	4	70	0	30	50	150	1
170105	Advanced Avionics ( Department Elective-I)	4	0	2	6	70	30	30	20	150	1
170106	Viscous and Boundary Layer Theory(Department Elective-I)	4	0	2	6	70	30	30	20	150	1
170001	Project - I	0	0	4	4	0	100	0	50	150	1
	<b>TOTAL</b>	<b>20</b>	<b>0</b>	<b>10</b>	<b>30</b>						

**Semester VIII**

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
180101	Aircraft Design - II	4	0	2	6	70	30	30	20	150	1
180102	Helicopter Engineering	4	0	0	4	70	0	30	50	150	1
180103	Space Dynamics	2	0	0	2	70	0	30	50	150	1
180104	Aircraft Control and Navigation (Department Elective-II)	4	0	2	6	70	30	30	20	150	1
180105	High Speed Aerodynamics and Experimental Techniques ( Department Elective-II)	4	0	2	6	70	30	30	20	150	1
180106	Project II	0	0	12	12	0	150	0	50	200	1
	<b>TOTAL</b>	<b>14</b>	<b>0</b>	<b>16</b>	<b>30</b>						