

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Environmental Science & Engineering(37)**  
**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	37
110002	Communication Skills	1	0	2	3	70	—	30	50	150	37
110003	Computer Programming & Utilization (Revised)	2	0	4	6	70	—	30	50	150	37
110004	Elements of Civil Engineering (Revised)	4	0	2	6	70	—	30	50	150	37
110005	Elements of Electrical Engineering	4	0	2	6	70	—	30	50	150	37
110006	Elements of Mechanical Engineering	4	0	2	6	70	—	30	50	150	37
110007	Environmental Studies	3	0	0	3	70	—	30	50	150	37
008 OR 11008	Maths-I (entry year 2008-10 having backlog)OR Calculus (entry year 2011-12)	3	2	0	5	70	—	30	50	150	37
009 OR 11009	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	37
110010	Mechanics of Solids (Revised)	3	0	2	5	70	—	30	50	150	37
110011	Physics	3	0	2	5	70	—	30	50	150	37
110012	Workshop	0	0	4	4	0	—	0	100	100	37
110013	Engineering Graphics	2	0	4	6	70	—	30	50	150	37
	<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							
130002	Advanced Engineering Mathematics	3	2	0	5	70	—	30	50	150	37
130602	Fluid Mechanics	3	0	2	5	70	—	30	50	150	37
131301	Environmental Science-1	3	0	2	5	70	—	30	50	150	37
131302	Environmental Microbiology	3	0	2	5	70	—	30	50	150	37

131303	Ecology and Remote Sensing	3	2	0	5	70	—	30	50	150	37
131304	Basics of Structural Engineering	3	2	0	5	70	—	30	50	150	37
	<b>TOTAL</b>	<b>18</b>	<b>6</b>	<b>6</b>	<b>30</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	37
140002	Management-1	2	0	0	2	70	—	30	50	150	37
141301	Design Of Environmental Structure	3	2	0	5	70	—	30	50	150	37
141302	Environmental Sciences-II	3	0	4	7	70	—	30	50	150	37
141303	Chemical Engineering Processes	3	2	0	5	70	—	30	50	150	37
141304	Water Pollution & Control	4	2	0	6	70	—	30	50	150	37
	<b>TOTAL</b>	<b>18</b>	<b>8</b>	<b>4</b>	<b>30</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	0	30	50	150	37
153701	Biodegradation and Bioremediation	3	2	0	5	70	0	30	50	150	37
153702	Applied Statistics & Environmental Instrumentations	4	0	2	6	70	0	30	50	150	37
153703	Solid waste Management	4	2	0	6	70	0	30	50	150	37
153704	Water & Wastewater Treatment Technologies	3	0	2	5	70	0	30	50	150	37
153705	Watershed Management (Institute Elective - II)	4	2	0	6	70	0	30	50	150	37
	<b>TOTAL</b>	<b>20</b>	<b>6</b>	<b>4</b>	<b>30</b>						

#### Semester - VI

Subject Code	Subject Name	Teaching Scheme (Hours)			Credits	University Exam (Theory)	University Exam (Practical)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
161301	Municipal Engineering	3	4	0	7	70	-	30	50	150	37
163701	Principles of Air and Noise	3	0	2	5	70	-	30	50	150	37

163702	Water & Wastewater Treatment Design	3	4	0	7	70	-	30	50	150	37
163703	Energy & Environment	4	2	0	6	70	-	30	50	150	37
161305	Occupational Health & Safety	3	2	0	5	70	-	30	50	150	37
	<b>Total</b>	<b>16</b>	<b>12</b>	<b>2</b>	<b>30</b>						

#### Semester - VII

Subject Code	Subject Name	Teaching Scheme (Hours)			Credits	University Exam		Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
171301	Advanced wastewater Treatment Technologies	4	2	0	6	70	30	30	20	150	37
171302	Air Pollution Control and Management	4	2	0	6	70	30	30	20	150	37
173701	Industrial waste management	4	2	2	8	70	30	30	20	150	37
171304	Cleaner Production and waste Utilization(Department Elective - I)	4	2	0	6	70	30	30	20	150	37
173702	Environmental Sanitation (Department Elective - I)	4	2	0	6	70	30	30	20	150	37
170001	Project - I	0	0	4	4	0	100	0	50	150	37
	<b>Total</b>	<b>16</b>	<b>8</b>	<b>6</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							
183701	Environmental Planning & Management	3	2	0	5	70	30	30	20	150	37
181302	Environmental Impact Assessment	3	2	0	5	70	30	30	20	150	37
183702	Environmental Risk Assessment and Management	3	4	0	7	70	30	30	20	150	37
181304	Environmental Legislation and Audit	3	2	0	5	70	30	30	20	150	37
181305	Ground Water Contamination (Department Elective - II)	3	2	0	5	70	30	30	20	150	37
181306	Project - II	0	0	8	8	0	100	0	50	150	37
	<b>Total</b>	<b>12</b>	<b>10</b>	<b>8</b>	<b>30</b>						