

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Electrical Engineering (09)**  
**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	9
110002	Communication Skills	1	0	2	3	70	—	30	50	150	9
110003	Computer Programming & Utilization (Revised)	2	0	4	6	70	—	30	50	150	9
110004	Elements of Civil Engineering (Revised)	4	0	2	6	70	—	30	50	150	9
110005	Elements of Electrical Engineering	4	0	2	6	70	—	30	50	150	9
110006	Elements of Mechanical Engineering	4	0	2	6	70	—	30	50	150	9

110007	Environmental Studies	3	0	0	3	70	—	30	50	150	9
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	9
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	9
110010	Mechanics of Solids (Revised)	3	0	2	5	70	—	30	50	150	9
110011	Physics	3	0	2	5	70	—	30	50	150	9
110012	Workshop	0	0	4	4	0	—	0	100	100	9
110013	Engineering Graphics	2	0	4	6	70	—	30	50	150	9
	<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	9
131101	Basic Electronics	4	0	2	6	70	—	30	50	150	9
130901	Circuits and Networks	4	0	2	6	70	—	30	50	150	9
130902	Analog and Digital Electronics	3	0	2	5	70	—	30	50	150	9
130903	Electrical and Electronics Measuring Instruments	3	0	0	3	70	—	30	50	150	9
130904	Electrical Machines-1	3	0	2	5	70	—	30	50	150	9
	<b>TOTAL</b>	<b>20</b>	<b>2</b>	<b>8</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	9
140002	Management-1	2	0	0	2	70	—	30	50	150	9
140701	Microprocessor And Interfacing	3	0	2	5	70	—	30	50	150	9
141701	Control Theory	4	0	2	6	70	—	30	50	150	9
140902	Electrical Power	4	0	0	4	70	—	30	50	150	9
140903	Electrical And Electronics Workshop	0	0	2	2	0	—	0	100	100	9
140904	Institute Elective-1(Energy Systems)	4	0	2	6	70	—	30	50	150	9
	<b>TOTAL</b>	<b>20</b>	<b>2</b>	<b>8</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	—	30	50	150	9
150901	Electrical Machine - II	3	0	2	5	70	—	30	50	150	9
150902	Power System Analysis and Simulation	3	0	2	5	70	—	30	50	150	9
150903	Power Electronics - I	3	0	2	5	70	—	30	50	150	9
150904	Elements of Electrical Design	3	0	2	5	70	—	30	50	150	9
150905	Switchgear	2	0	0	2	70	—	30	50	150	9
150906	Electrical Power Utilization and Traction (Institute Elective -II)	4	0	2	6	70	—	30	50	150	9
	<b>TOTAL</b>	<b>20</b>	<b>0</b>	<b>10</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							
160901	Electrical Machine - III	3	0	2	5	70	—	30	50	150	9
160902	Power Electronics - II	4	0	2	6	70	—	30	50	150	9
160903	Microcontroller	3	0	2	5	70	—	30	50	150	9
160904	High Voltage Engineering	4	0	2	6	70	—	30	50	150	9
160905	Electrical & Electronic Measurement	3	0	2	5	70	—	30	50	150	9
160906	Theory of Electromagnetics	3	0	0	3	70	—	30	50	150	9
	<b>TOTAL</b>	<b>20</b>	<b>0</b>	<b>10</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							
170901	Inter Connected Power System	3	0	2	5	70	30	30	20	150	9
170902	Electrical Machine Design-I	3	0	2	5	70	30	30	20	150	9
170903	Power System Protection	3	0	2	5	70	30	30	20	150	9
170904	Industrial Instrumentation	3	0	2	5	70	30	30	20	150	9
170905	Advanced Power System - I (Department Elective - I)	4	0	2	6	70	30	30	20	150	9
170906	Advanced Power Electronics - I (Department Elective - I)	4	0	2	6	70	30	30	20	150	9
170907	Advanced Microcontrollers & Embedded System (Department Elective - I)	4	0	2	6	70	30	30	20	150	9
170001	Project - I	0	0	4	4	0	100	0	50	150	9
<b>TOTAL</b>		<b>16</b>	<b>0</b>	<b>14</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							
180901	Commissioning of Electrical Equipments	3	0	2	5	70	30	30	20	150	9
180902	Electrical Power Utilization	3	0	0	3	70	0	30	50	150	9
180903	Power System Practice and Design	3	0	0	3	70	0	30	50	150	9
180904	Electrical Machine Design II	3	0	2	5	70	30	30	20	150	9
180905	Project II	0	0	8	8	0	100	0	50	150	9
180906	Advanced Power System II (Department Elective - II)	4	0	2	6	70	30	30	20	150	9
180907	Advanced Power Electronics II (Department Elective - II)	4	0	2	6	70	30	30	20	150	9
180908	Advanced Processor and Controllers (Department Elective - II)	4	0	2	6	70	30	30	20	150	9
<b>TOTAL</b>		<b>16</b>	<b>0</b>	<b>14</b>	<b>30</b>						