

GUJARAT TECHNOLOGICAL UNIVERSITY
Power Electronics (24)
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	24
110002	Communication Skills	1	0	2	3	70	—	30	50	150	24
110003	Computer Programming & Utilization (Revised)	2	0	4	6	70	—	30	50	150	24
110004	Elements of Civil Engineering (Revised)	4	0	2	6	70	—	30	50	150	24
110005	Elements of Electrical Engineering	4	0	2	6	70	—	30	50	150	24
110006	Elements of Mechanical Engineering	4	0	2	6	70	—	30	50	150	24
110007	Environmental Studies	3	0	0	3	70	—	30	50	150	24
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	24

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	24
110010	Mechanics of Solids (Revised)	3	0	2	5	70	—	30	50	150	24
110011	Physics	3	0	2	5	70	—	30	50	150	24
110012	Workshop	0	0	4	4	0	—	0	100	100	24
110013	Engineering Graphics	2	0	4	6	70	—	30	50	150	24
	TOTAL	35	4	26	65						

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	24
131101	Basic Electronics	4	0	2	6	70	—	30	50	150	24
130901	Circuits and Networks	4	0	2	6	70	—	30	50	150	24
130701	Digital Logic Design	4	0	2	6	70	—	30	50	150	24
132401	Basic Power Systems Engineering	3	0	0	3	70	—	30	50	150	24
132402	Simulation and Design Tools	0	0	2	2	0	—	0	100	100	24
132403	Electronics Practice	0	0	2	2	0	—	0	100	100	24
	TOTAL	18	2	10	30						

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	24
140002	Management-1	2	0	0	2	70	—	30	50	150	24
141101	Advance Electronics	4	0	2	6	70	—	30	50	150	24
141701	Control Theory	4	0	2	6	70	—	30	50	150	24
142401	Electro Mechanical Energy Conversion.- 1	3	0	2	5	70	—	30	50	150	24
142402	Institute Elective-1(Fundamentals of Power Electronics)	4	0	2	6	70	—	30	50	150	24
	TOTAL	20	2	8	30						

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	24
152401	Power Electronics Devices & Components	4	0	0	4	70	—	30	50	150	24
152402	Electrical Measurements & Electronics Instruments	3	0	2	5	70	—	30	50	150	24
152403	Applied Power Electronics	4	0	0	4	70	—	30	50	150	24
152404	Electro Mechanical Energy conversion - II	3	0	2	5	70	—	30	50	150	24
152405	Power Electronics Applications (Institute Elective - II)	4	0	2	6	70	—	30	50	150	24
152406	Power Electronics Practice - I	0	0	4	4	0	—	0	100	100	24
	TOTAL	20	0	10	30						

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							
162401	Industrial Instrumentation	3	0	2	5	70	—	30	50	150	24
162402	Microcontrollers for Power Electronics	4	0	2	6	70	—	30	50	150	24
162403	Switch Gear & Fault Analysis	4	0	2	6	70	—	30	50	150	24
162404	Industrial Drives & Control - I	3	0	2	5	70	—	30	50	150	24
162405	Power Processing Circuits - I	4	0	0	4	70	—	30	50	150	24
162406	Power Electronics Practice - II	0	0	4	4	0	—	0	100	100	24
	TOTAL	18	0	12	30						

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							
172401	Power Electronics Systems Modelling	4	0	2	6	70	30	30	20	150	24
172402	Industrial Drives and Control - II	4	0	2	6	70	30	30	20	150	24
172403	Power Processing Circuits - II	4	0	0	4	70	0	30	50	150	24
172404	Power Electronics Practice - III	0	0	4	4	0	80	0	20	100	24
172405	Industrial Communication Systems (Department Elective - I)	4	0	2	6	70	30	30	20	150	24
172406	Power Electronics Design & Control (Department Elective - I)	4	0	2	6	70	30	30	20	150	24
172407	Embedded Systems for Power Electronics (Department Elective - I)	4	0	2	6	70	30	30	20	150	24
170001	Project - I	0	0	4	4	0	100	0	50	150	24
	TOTAL	16	0	14	30						

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							
182401	Power Electronics Applications in Power System	4	0	2	6	70	30	30	20	150	24
182402	Digital Signal Processing	4	0	2	6	70	30	30	20	150	24
182403	Industrial Automation (Department Elective II)	4	0	2	6	70	30	30	20	150	24
182404	Industrial Measurement (Department Elective II)	4	0	2	6	70	30	30	20	150	24
182405	Digital Control of Power Processing Circuits (Department Elective II)	4	0	2	6	70	30	30	20	150	24
182406	Project II	0	0	12	12	0	150	0	50	200	24
	TOTAL	12	0	18	30						