

GUJARAT TECHNOLOGICAL UNIVERSITY
Instrumentation & Control Engineering (17)
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.

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	17
110002	Communication Skills	1	0	2	3	70	—	30	50	150	17
110003	Computer Programming & Utilization (Revised)	2	0	4	6	70	—	30	50	150	17
110004	Elements of Civil Engineering (Revised)	4	0	2	6	70	—	30	50	150	17
110005	Elements of Electrical Engineering	4	0	2	6	70	—	30	50	150	17
110006	Elements of Mechanical Engineering	4	0	2	6	70	—	30	50	150	17
110007	Environmental Studies	3	0	0	3	70	—	30	50	150	17
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	17
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	17
110010	Mechanics of Solids (Revised)	3	0	2	5	70	—	30	50	150	17
110011	Physics	3	0	2	5	70	—	30	50	150	17
110012	Workshop	0	0	4	4	0	—	0	100	100	17
110013	Engineering Graphics	2	0	4	6	70	—	30	50	150	17
	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	17
131101	Basic Electronics	4	0	2	6	70	—	30	50	150	17
130901	Circuits and Networks	4	0	2	6	70	—	30	50	150	17
130701	Digital Logic Design	4	0	2	6	70	—	30	50	150	17
131701	Electrical Machines	3	0	0	3	70	—	30	50	150	17
131702	Simulation and Design Tools	0	0	2	2	0	—	0	100	100	17
131703	Instrumentation Workshop	0	0	2	2	0	—	0	100	100	17
	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	17
140002	Management-1	2	0	0	2	70	—	30	50	150	17
140701	Microprocessor And Interfacing	3	0	2	5	70	—	30	50	150	17
141101	Advance Electronics	4	0	2	6	70	—	30	50	150	17
141701	Control Theory	4	0	2	6	70	—	30	50	150	17
141702	Institute Elective -1(Transducers)	4	0	2	6	70	—	30	50	150	17
	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	17
151001	Microcontroller and Interfacing	3	0	2	5	70	—	30	50	150	17
151701	Industrial Measurement	3	0	0	3	70	—	30	50	150	17
151702	Sensors and Signal Conditioning	3	0	2	5	70	—	30	50	150	17
151703	Electronics in Industries	3	0	2	5	70	—	30	50	150	17
151704	Industrial Control Systems(Institute Elective-II)	4	0	2	6	70	—	30	50	150	17
151705	Practices in Measurement	0	0	4	4	0	—	0	100	100	17
	TOTAL	18	0	12	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							
161701	Instrumentation System	4	0	2	6	70	—	30	50	150	17
161702	Process Control	4	0	2	6	70	—	30	50	150	17
161703	Control System Components	3	0	0	3	70	—	30	50	150	17
161704	Analog and Digital Communication	3	0	2	5	70	—	30	50	150	17
161705	Instrumentation Measurement - II	4	0	2	6	70	—	30	50	150	17
161706	Practices in Instrumentation and Control	0	0	4	4	0	—	0	100	100	17
	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							
171701	Control System Design	4	0	2	6	70	30	30	20	150	17
171702	Programmable Automation Controller	4	0	2	6	70	30	30	20	150	17
171703	Industrial Data Communication	4	0	0	4	70	0	30	50	150	17
171704	Digital Signals & Systems	4	0	0	4	70	0	30	50	150	17
171705	Instrumentation for Bio Medical Application (Department Elective - I)	4	0	2	6	70	30	30	20	150	17
171706	Instrumentation for Nano technology (Department Elective - I)	4	0	2	6	70	30	30	20	150	17
170001	Project - I	0	0	4	4	0	100	0	50	150	17
	TOTAL	20	0	10	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							
181701	Control Systems Architecture	4	0	2	6	70	30	30	20	150	17
181702	Motion Control	4	0	2	6	70	30	30	20	150	17
181703	Project II	0	0	18	18	0	200	0	50	250	17
	TOTAL	8	0	22	30						