



Second Year (Lateral Entry) Teaching Scheme

Admission Year 2026-27

**Bachelor of Technology (Lateral Entry)
ECE (VLSI Design and Technology)**

Faculty of Engineering and Technology

Parul University

Vadodara, Gujarat, India

Semester - 3 : Basic Science Course (BSC)-IV (2025-26)

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
03019103B S02	Probability and Statistics	3	3	-	-	20	-	20	60	-	40	-	100

Semester - 3 : Engineering Science Course (ESC)-V (2025-26)

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
03010703E S05	Introduction to Python Programming	2	2	-	-	20	-	20	60	-	40	-	100
03010703E S06	Introduction to Python Programming Lab	1	-	2	-	-	-	-	-	30	-	25	50

Semester - 3 : Humanities and Social Science, including Management Course (HSMC)-III (2025-26)

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
03010003H M01	Functional Communication Skills	2	1	2	-	40	20	-	60	30	40	25	150

Semester - 3 : Mandatory Course (MNC)-III (2025-26)

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
17013003M C01	Indian Constitution	0	1	-	-	-	-	50	-	-	20	-	50

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester -4 Professional Elective Courses

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
03019704P E01	Control System	3	3	-	-	20	-	20	60	-	40	-	100
03019704P E02	Control System Lab	1	-	2	-	-	20	0	-	30		25	50
03019704P E03	Sensor and Transducer	3	3	-	-	20	-	20	60	-	40	-	100
03019704P E04	Sensor and Transducer Lab	1	-	2	-	-	20	0	-	30		25	50
03019704P E05	PLC and SCADA	3	3	-	-	20	-	20	60	-	40	-	100
03019704P E06	PLC and SCADA Lab	1	-	2	-	-	20	0	-	30		25	50
03019704P E07	Biomedical Instrumentation	3	3	-	-	20	-	20	60	-	40	-	100
03019704P E08	Biomedical Instrumentation Lab	1	-	2	-	-	20	0	-	30		25	50



Semester - 4: Multidisciplinary Open Professional Electives Courses

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
15M10504 UE01	Introduction to Cognitive Psychology	3	3	-	-	-	-	40	60	-			100
15M10504 UE02	Human Behaviour	3	3	-	-	-	-	40	60	-			100
15M10504 UE03	Emotional Intelligence	3	3	-	-	-	-	40	60	-			100
19M10004 UE01	Psychiatry: An overview	3	3	-	-	-	-	40	60	-			100
19M10004 UE02	Philosophy and Critical Thinking	3	3	-	-	-	-	40	60	-			100

Semester – 4 Basic Science Courses

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
03019104B S02	Numerical Methods	3	3	0	0	20	-	20	60	-	40	-	100



Semester – 4 Humanities and Social Science, including Management Courses

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
03010002H M01	Engineering Ethics & Organizational Behavior	2	1	2	-	20	20	20	60	30	40	25	150

Semester – 4 Mandatory courses

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
03010004 MC01	NCC	-	1	-	-	-	-	50	-	-		25	50
03010004 MC02	NSS	-	1	-	-	-	-	50	-	-		25	50
03010004 MC03	Sports	-	1	-	-	-	-	50	-	-		25	50
03M10004 MC01	Yoga and Positive Psychology for Managing Career and Life		1	-	-	-	-	50	-	-		25	50
03M10004 MC02	The Science of Happiness and Wellbeing	-	1	-	-	-	-	50	-	-		25	50

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50