



Second Year (Lateral Entry) Teaching Scheme

Admission Year 2026-27

**Bachelor of Technology (Lateral Entry)
Mechanical Engineering**

Faculty of Engineering & Technology

Parul University

Vadodara, Gujarat, India

Semester 3

						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.	
03010903PC01	Material Engineering	2	2	-	-	20	-	20	60	-	40	-	100
03010903PC02	Material Engineering Laboratory	1	-	2	-	-	20	-	-	30	-	25	50
03010903PC03	Manufacturing Processes	2	2	-	-	20	-	20	60	-	40	-	100
03010903PC04	Manufacturing Processes Laboratory	1	-	2	-	-	20	-	-	30	-	25	50
03010903PC05	Strength of Materials	3	3	-	-	20	-	20	60	-	40	-	100
03010903PC07	Kinematics and Theory of Machines	3	3	-	-	20	-	20	60	-	40	-	100
03010903PC08	Kinematics and Theory of Machines Laboratory	1	-	2	-	-	20	-	-	30	-	25	50
	Basic Science Course (BSC)-IV (2025-26)	4	4	-	-	20	-	20	60	-	40	-	100
	Engineering Science Course (ESC)-V (2025-26)	4	3	-	1	20	50	20	60	-	40	25	150
	Humanities and Social Science, including Management Course (HSMC)-III (2025-26)	2	1	2	-	40	20	-	60	30	40	25	150
	Mandatory Course (MNC)-III (2025-26)	0	1	-	-	-	-	50	-	-	20	-	50
	Total	23	19	8									1000

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.	
03019103BS05	Partial Differential Equations and Statistics	4	4	-	-	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.	
03010903ES01	Thermodynamics	4	3	-	1	20	50	20	60	-	40	25	150

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.	
03010003HM01	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.	
17013003MC01	Indian Constitution	0	1	-	-	-	-	50	-	-	20	-	50
	Introduction to Sustainability, Climate Change and ESG	0	1	-	-	-	-	50	-	-	20	-	50

Semester - 4: Professional Elective Courses (PEC-I)

						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.	
03010904PE01	Applied Thermodynamics	4	3	-	1	20	50	20	60	-	40	25	100
03010904PE03	Advanced Materials	4	3	-	1	20	50	20	60	-	40	25	100
03010904PE05	MATLAB Programming	4	3	-	1	20	50	20	60	-	40	25	100
03010904PE05	Python Programming	4	3	-	1	20	50	20	60	-	40	25	100

Semester - 4: Multidisciplinary Open Professional Electives Courses (MOPEC-II)

						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.	
15M10504UE01	Introduction to Cognitive Psychology	3	3	-	-	20	-	20	60	-	40	-	100
15M10504UE02	Human Behaviour	3	3	-	-	20	-	20	60	-	40	-	100
15M10504UE03	Emotional Intelligence	3	3	-	-	20	-	20	60	-	40	-	100
19M10004UE01	Psychiatry: An overview	3	3	-	-	20	-	20	60	-	40	-	100
19M10004UE02	Philosophy and Critical Thinking	3	3	-	-	20	-	20	60	-	40	-	100

Semester - 4: Humanities and Social Science, including Management Course (HSMC)-IV

						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.	
03010004HM01	Professional Soft Skills – I	1	-	2	-		20	-		30		25	50

Semester - 4: Mandatory Course (MNC)-IV

						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.	
03010004MC01	NCC	0	1	-	-	-	-	50	-	-	20	-	50
03010004MC02	NSS	0	1	-	-	-	-	50	-	-	20	-	50
03010004MC03	Sports	0	1	-	-	-	-	50	-	-	20	-	50
03M10004MC01	Yoga and Positive Psychology for Managing Career and Life	0	1	-	-	-	-	50	-	-	20	-	50
03M10004MC02	The Science of Happiness and Wellbeing	0	1	-	-	-	-	50	-	-	20	-	50