



Second Year Teaching Scheme

Admission Year 2026-27

Bachelor of Technology (Lateral)

Chemical Engineering

Faculty of Engineering & Technology

Parul University

Vadodara, Gujarat, India

Semester - 3

				Teaching Scheme			Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
				(Hours / Week)										
NCrF Credit Level	Subject Code	Subject Name	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.	
	03010303PC01	Particle and Fluid Particle Processing	3	3		-	20		20	60		40		100
	03010303PC02	Particle and Fluid Particle Processing Lab	1		2			20			30		25	50
	03010303PC03	Fluid Mechanics	3	3		-	20		20	60		40		100
	03010303PC04	Fluid Mechanics Lab	1		2			20			30		25	50
	03010303PC05	Utilities in Chemical Process Plant	2	2	-	-	20	-	20	60	-	40	-	100
	03010303PC06	Heat Transfer Lab	1		2			20			30		25	50
	03010303PC07	Heat Transfer	3	3		-	20		20	60		40		100
	03019503BS01	Chemistry-II	3	3		-	20		20	60		40		100
	03019503BS02	Chemistry-II Lab	1		2			20			30		25	50
	03019103BS03	Complex Variables and PDE	3	3	-	-	20	-	20	60	-	40	-	100
	03010003HM01	Cognitive Reasoning	1	-	2	-		20			30		25	50
	17013003MC01	Indian Constitution	0	1	-	-	-		50	-			25	50
		Total credits	22											

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical,

Theory Passing % : 40 Practical Passing % : 50

Semester - 4

NCrF Credit Level	Subject Code	Subject Name	Credit	Teaching Scheme			Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
				(Hours / Week)	Lect	Lab	Tut	T	P	CE	T			
	03010304PC01	Mass Transfer-I	4	3		1	20		20	60		40		100
	03010304PC02	Mass Transfer-I Lab	1		2				20		30		25	50
	03010304PC03	Thermodynamics-I	4	3	-	1	20	-	20	60	-	40	-	100
	03010004BS01	Material Science & Technology	2	2	-	-	20	-	20	60	-	40	-	100
	03010004HM01	Engineering Ethics & Organizational Behavior	2	1	2	-	40	20	-	60	30			150
		Professional Elective Courses (PECs)-I												
	03010304PE01	Numerical Methods in Chemical Engineering	4	4	-	-	20		20	60		40		100
	03010304PE03	Biochemical Engineering	4	4	-	-	20		20	60		40		100
	03010304PE05	Bioprocess Engineering	4	4	-	-	20		20	60		40		100
	03010304PE07	Fuels and Combustion	4	4	-	-	20		20	60		40		100
		Multidisciplinary Open Professional Electives Courses (MOPECs)												
	15M10504UE01	Introduction to Cognitive Psychology	3	3	-	-	-	-	40	60	-	40		100
	15M10504UE03	Emotional Intelligence	3	3	-	-	-	-	40	60	-	40		100
	19M10004UE01	Psychiatry: An overview	3	3	-	-	-	-	40	60	-	40		100
	19M10004UE02	Philosophy and Critical Thinking	3	3	-	-	-	-	40	60	-	40		100
		Mandatory courses (MNC)												
	03010004MC01	NCC	0	1	-	-	-	-	50	-	-		25	50
	03010004MC02	NSS	0	1	-	-	-	-	50	-	-		25	50
	03010004MC03	Sports	0	1	-	-	-	-	50	-	-		25	50

	03M10004MC01	Yoga and Positive Psychology for Managing Career and Life	0											
	03M10004MC02	The Science of Happiness and Wellbeing	0											
		Total credits	20											

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Theory Passing % : 40 Practical Passing % : 50