



First Year Teaching Scheme

Admission Year 2026-27

**Bachelor of Technology
Mechatronics Engineering**

Faculty of Engineering & Technology

Parul University

Vadodara, Gujarat, India

Semester – 1

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	P	Int.+Ext.	
4.5	03011301PC01	Basic Electrical and Electronics Engineering	4	3	2	-	20	20	20	60	30	40	25	150
	03019101BS02	Linear Algebra and Calculus	4	4	0	0	20	-	20	60	-	40	-	100
	03019201BS01	Physics of Semiconductors	4	3	2	-	20	20	20	60	30	40	25	150
	03010501ES01	Programming for Problem Solving	4	3	2	0	20	20	20	60	30	40	25	150
	03010901ES02	Engineering Graphics & Design	4	2	4	-	20	20	20	60	30	40	25	150
	03010001HM01	Principles of Communication Skills	1	-	2	-	-	20	0	-	30			50
	03019101MC01	Student Induction Program with essence of Indian Knowledge System - 3 weeks	-	1	-	-	-	-	50	-	-	20	-	50
		Total credits	21											

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

Theory Passing % : 40 Practical Passing % : 50

Semester – 2

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	P	Int.+Ext.	
4.5	03011302PC01	Mechatronics Workshop	3	1	4	-	50	50	-	-	50	-	50	150
	03M10002UE01	Privacy and Security in Online Social-Media	3	3	-	-	-	-	40	60	-			100
	06M10102UE02	Indian Economy: Some Contemporary Perspectives	3	3	-	-	-	-	40	60	-			100
	03M10002UE02	Design, Technology and Innovation	3	3	-	-	-	-	40	60	-			100
	06M10502UE03	Intellectual Property	3	3	-	-	-	-	40	60	-			100
	06M10202UE01	Principles of Management	3	3	-	-	-	-	40	60	-			100
	03019102BS02	Differential Equations and Vector Calculus	4	4	0	0	20	-	20	60	-	40	-	100
	03010901ES01	Elements of Mechanical Engineering	4	3	2	0	20	20	20	60	30	40	25	150
	03010402ES01	Mechanics of Solids	4	3	2	-	20	20	20	60	30	40	25	150
	03010002HM01	Advanced Communication and Interpersonal Skills	2	1	2	-	40	20	0	60	30			150
	03010002MC01	Environmental Science	-	1	-	-	-	-	50	-	-	20	-	50
	03010102EX01													
		3D Printing and Design (Swayam+, NcrF 4.5)												
		Industrial Training												
	Total credits	20												

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

Theory Passing % : 40 Practical Passing % : 50