



**First Year Teaching Scheme**

**Admission Year 2026-27**

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**Bachelor of Technology**  
**Robotics and Artificial Intelligence**

**Faculty of Engineering & Technology**

**Parul University**

**Vadodara, Gujarat, India**

### Semester - 1

						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.	
03016001P C01	Programming for Problem Solving	4	3	2	-	20	20	20	60	30	40	25	150
	Basic Science Course (BSC)-I (2025-26)	4	4	-	-	20	-	20	60	-	40	-	100
	Engineering Science Course (ESC)-I (2025-26)	4	2	4	-	20	20	20	60	30	40	25	150
	Engineering Science Course (ESC)-II (2025-26)	4	3	2	-	20	20	20	60	30	40	25	150
	Engineering Science Course (ESC)-III (2025-26)	3	1	4	-	20	20	20	60	30	40	25	150
	Humanities and Social Science, including Management Course (HSMC)-I (2025-26)	1	-	2	-	-	20	-	-	30	-	25	50
	Mandatory Course (MNC)-I (2025-26)	0	12	-	-	-	-	50	-	-	20	-	50
	<b>Total</b>	<b>20</b>	<b>13</b>	<b>14</b>									<b>800</b>

### Semester - 1 : Basic Science Course (BSC)-I (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.	
03019101B S01	Calculus	4	4	-	-	20	-	20	60	-	40	-	100

**Semester - 1 : Engineering Science Course (ESC)-I (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.	
03010901E S02	Engineering Graphics and Design	4	2	4	-	20	20	20	60	30	40	25	150

**Semester - 1 : Engineering Science Course (ESC)-II (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.	
03010601E S02	Electrical and Electronics Engineering	4	3	2	-	20	20	20	60	30	40	25	150
03019201B S01	Physics of Semiconductors	4	3	2	-	20	20	20	60	30	40	25	150

**Semester - 1 : Engineering Science Course (ESC)-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.	
03016001E S01	Design Thinking	3	1	4	-	20	20	20	60	30	40	25	150

**Semester - 1 : Humanities and Social Science, including Management Course (HSMC)-I (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.	
03010001H M01	Principles of Communication Skills	1	-	2	-	-	20	-	-	30	-	25	50

**Semester - 1 : Mandatory Course (MNC)-I (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.	
03010001M C01	Student Induction Program with Essence of Indian Knowledge System	0	12	-	-	-	-	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 - 2

						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.	
03016002P C01	Mechanics of Solid	4	3	2	0	20	20	20	60	30	40	25	150
	Basic Science Course (BSC)-II (2025-26)	4	3	2	-	20	20	20	60	30	40	25	150
	Basic Science Course (BSC)-III (2025-26)	4	4	-	-	20	-	20	60	-	40	-	100
	Engineering Science Course (ESC)-IV (2025-26)	3	2	2	-	20	20	20	60	30	40	25	150
	Humanities and Social Science, including Management Course (HSMC)-II (2025-26)	2	1	2	-	40	20	-	60	30	40	25	150
	Mandatory Course (MNC)-II (2025-26)	0	1	-	-	-	-	50	-	-	20	-	50
	Multidisciplinary Open Professional Electives Course (MOPEC)-I (2025-26)	3	3	-	-	20	-	20	60	-	40	-	100
	<b>Total</b>	<b>20</b>	<b>17</b>	<b>8</b>	<b>0</b>								<b>850</b>

## Semester - 2 : Basic Science Course (BSC)-II (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.	
03010601E S02	Electrical and Electronics Engineering	4	3	2	-	20	20	20	60	30	40	25	150
03019201B S01	Physics of Semiconductors	4	3	2	-	20	20	20	60	30	40	25	150

**Semester - 2 : Basic Science Course (BSC)-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.	
03019102B S01	Linear Algebra	4	4	-	-	20	-	20	60	-	40	-	100

**Semester - 2 : Engineering Science Course (ESC)-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.	
03016002E S01	Robotics Workshop	3	2	2	-	20	20	20	60	30	40	25	150

**Semester - 2 : Humanities and Social Science, including Management Course (HSMC)-II (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.	
03010002H M01	Advanced Communication and Interpersonal Skills	2	1	2	-	40	20	-	60	30	40	25	150

**Semester - 2 : Mandatory Course (MNC)-II (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.	
03010002M C01	Environmental Science	0	1	-	-	-	-	50	-	-	20	-	50

**Semester - 2 : Multidisciplinary Open Professional Electives Course (MOPEC)-I (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.	
03M10002UE01	Privacy and Security in Online Social Media	3	3	-	-	20	-	20	60	-	40	-	100
03M10002UE02	Design, Technology and Innovation	3	3	-	-	20	-	20	60	-	40	-	100
06M10102UE02	Indian Economy: Some Contemporary Perspectives	3	3	-	-	20	-	20	60	-	40	-	100
06M10202UE01	Principles of Management	3	3	-	-	20	-	20	60	-	40	-	100
06M10502UE03	Intellectual Property	3	3	-	-	20	-	20	60	-	40	-	100

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**Theory Passing % : 40 Practical Passing % : 50**