



Semester - 1

Subject	Credit	Lecture	Lab	Tutorial
Environmental Science	0	2	0	0
Engineering Mechanics	3	3	0	0
Engineering Mechanics Lab	1	0	2	0
Mathematics I	3	2	0	1
Basic Physics	3	3	0	0
Basic Physics Lab	1	0	2	0
Applied Chemistry	3	3	0	0
Applied Chemistry Lab	1	0	2	0
Communication Skills - I	1	1	0	0
Total	16	14	6	1

Semester - 2

Subject	Credit	Lecture	Lab	Tutorial
Fundamentals of Electrical and Electronics Engineering	3	3	0	0
Fundamentals of Electrical and Electronics Engineering Lab	1	0	2	0
Introduction to IT Systems	1	1	0	0
Introduction to IT Systems Lab	2	0	4	0
Engineering Workshop Practice Lab	2	0	4	0
Fundamentals of Mechanical Engineering	3	3	0	0
Engineering Graphics Lab	2	0	4	0
Mathematics-II	4	3	0	1
Communication Skills – II	1	1	0	0
Total	19	11	14	1



Semester - 3

Subject	Credit	Lecture	Lab	Tutorial
Entrepreneurship and Start-ups	1	1	0	0
Electronics Circuits and Network	3	3	0	0
Electronics Circuits and Network Lab	1	0	2	0
Analog and Digital Electronics	3	3	0	0
Analog and Digital Electronics Lab	1	0	2	0
Fundamental of Robotics Engineering	3	3	0	0
Fundamental of Robotics Engineering Lab	1	0	2	0
Manufacturing Technology	3	3	0	0
Manufacturing Technology Lab	1	0	2	0
Professional Communication & Life skill	1	1	0	0
Summer Internship-I	2	0	0	0
Total	20	14	8	0

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab



Semester - 4

Subject	Credit	Lecture	Lab	Tutorial
Essence of Indian Knowledge and Tradition	0	2	0	0
Electronics Measurement and Instrumentation Lab	1	0	2	0
Control Engineering	3	3	0	0
Control Engineering Lab	1	0	2	0
Robot Kinematics	3	3	0	0
Robot Kinematics Lab	1	0	2	0
Communication Engineering	3	3	0	0
Communication Engineering Lab	1	0	2	0
Microprocessor and Microcontroller	3	3	0	0
Microprocessor and Microcontroller Lab	1	0	2	0
Hydraulic and Pneumatic Systems	3	3	0	0
Hydraulic and Pneumatic Systems Lab	1	0	2	0
Total	21	17	12	0



Semester - 5

Subject	Credit	Lecture	Lab	Tutorial
Materials Engineering	3	3	0	0
Materials Engineering Lab	1	0	2	0
Digital Signal Processing	3	3	0	0
Digital Signal Processing Lab	1	0	2	0
Project I	2	0	4	0
Summer Internship 2 (6 Weeks After Sem-4)	3	0	0	0
Open Elective-I (Compulsory Subjects :1)	3	3	0	0
Program Elective - I (Compulsory Subjects :1)	3	3	0	0
Program Elective – II (Compulsory Subjects :1)	1	0	2	0
Program Elective Lab- I (Compulsory Subjects :1)	3	3	0	0
Program Elective Lab – II (Compulsory Subjects :1)	1	0	2	0
Total	24	15	12	0

Semester – 5 : Program Elective I

Subject	Credit	Lecture	Lab	Tutorial
Power Electronics and Drives	3	3	0	0
Power Electronics and Drives Lab	1	0	2	0
Industrial Automation	3	3	0	0
Industrial Automation Lab	1	0	2	0
Artificial Intelligence	3	3	0	0
Artificial Intelligence Lab	1	0	2	0



Semester – 5 : Program Elective II

Subject	Credit	Lecture	Lab	Tutorial
Internet of Things	3	3	0	0
Internet of Things Lab	1	0	2	0
Process Control	3	3	0	0
Process Control Lab	1	0	2	0
Python Programming	3	3	0	0
Python Programming Lab	1	0	2	0

Semester – 5 : Open Elective I

Subject	Credit	Lecture	Lab	Tutorial
Fundamentals of Management	3	3	0	0
Cyber Security	3	3	0	0



Semester - 6

Subject	Credit	Lecture	Lab	Tutorial
Indian Constitution	0	2	0	0
Robot Dynamics	3	3	0	0
Robot Dynamics Lab	1	0	2	0
Seminar	1	0	2	0
Project II	2	0	4	0
Open Elective-II (Compulsory Subjects :1)	3	3	0	0
Program Elective - III (Compulsory Subjects :1)	3	3	0	0
Program Elective Lab – III (Compulsory Subjects :1)	1	0	2	0
Total	14	11	10	0

Semester – 6 : Open Elective II

Subject	Credit	Lecture	Lab	Tutorial
Product Design	3	3	0	0
Operations Research	3	3	0	0

Semester– 6 Programme Elective III

Subject	Credit	Lecture	Lab	Tutorial
Vision systems and Image Processing	3	3	0	0
Vision systems and Image Processing Lab	1	0	2	0
Robotics System Design	3	3	0	0
Robotics System Design Lab	1	0	2	0
Industrial Networking	3	3	0	0
Industrial Networking Lab	1	0	2	0



PARUL UNIVERSITY

WAGHODIA, VADODARA

Subject Teaching Scheme

Course: Diploma | **Curriculum:** ENGG & TECH - Diploma – RA
