



**SARDAR PATEL UNIVERSITY,
VALLABH VIDYA NAGAR
(Reaccredited with 'A' Grade by NAAC (CGPA3.25)
Syllabus with effect from the Academic Year 2022-23**

**PROGRAMME STRUCTURE
Integrated Bachelor and Master Programmes in (A Group)
Semester (I)**

Programme outcome (PO) -for B.Sc. MSc (A Group) programme	The integrated bachelors - masters programs are designed as per NEP-2020 and academic bank of credits with dual degrees integrated into one. The exit option with a UG degree after successful completion of the required credits is offered to the students. The curricular design enables students to learn foundation courses along with skill and ability enhancement modules. Advance topics are taught in the last two years with a compulsory research component of internship/project dissertation using sophisticated instruments or methodology. The personal based mentoring enhances the job opportunity through on/off campus placement. The students would be equipped with necessary background to take up advanced doctoral research
Program Specific Outcome (PSO) –	

Type of Course	Subject	Course Code	Name of Course	T/P	Credit	Teaching Hours Per week	Exam Duration	Component of Marks			
								Internal	External	Total	
Ability Enhancement	English	IS01AENG51	English for Communication - I	T	2	2	1.5 Hrs	15	35	50/20	
	Computer	IS01ACOM51	Introduction to Computers	T	2	2	1.5 Hrs	15	35	50/20	
Core Courses	Chemistry	IS01CCHE51	Chemistry - I	T	2	2	1.5 Hrs	15	35	50/20	
		IS01CCHE52	Chemistry Practical - I	P	1	2	2 Hrs	15	35	50/20	
	Physics	IS01CPHY51	Foundations in Physics - I	T	2	2	1.5 Hrs	15	35	50/20	
		IS01CPHY52	Foundations in Physics Practical - I	P	1	2	2 Hrs	15	35	50/20	
	Material Science	IS01CMTS51	Materials Science - I	T	2	2	1.5 Hrs	15	35	50/20	
		IS01CMTS52	Materials Science Practical - I	P	1	2	2 Hrs	15	35	50/20	
	Electronics	IS01CELE51	Analog and Digital Electronics -I	T	2	2	1.5 Hrs	15	35	50/20	
		IS01CELE52	Electronics Practical - I	P	1	2	2 Hrs	15	35	50/20	
	Mathematics	IS01CMTH51	Calculus	T	2	2	1.5 Hrs	15	35	50/20	
		IS01CMTH52	Problem Solving and Exercises in Calculus	P	1	2	2 Hrs	15	35	50/20	
	Applied Statistics	IS01CAST51	Descriptive Statistics for Univariate Data-I	T	2	2	1.5 Hrs	15	35	50/20	
		IS01CAST52	Practical on Descriptive Statistics for Bivariate Data	P	1	2	2 Hrs	15	35	50/20	
						22	28		210	490	700