



**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 (II)**

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	
								Total /Passing	Total /Passing	Total /Passing	
Ability Enhancement	English	IS02AENG51	English for Communication II	T	2	2	1.5 Hrs	15/06	35/14	50/20	
	Environment	IS02AENV51	Environmental Studies	T	2	2	1.5 Hrs	15/06	35/14	50/20	
Core Courses	Chemistry	IS02CCHE51	Chemistry II	T	2	2	1.5 Hrs	15/06	35/14	50/20	
		IS02CCHE52	Chemistry Practical II	P	1	2	2 Hrs	15/06	35/14	50/20	
	Physics	IS02CPHY51	Foundations in Physics I	T	2	2	1.5 Hrs	15/06	35/14	50/20	
		IS02CPHY52	Foundations in Physics Practical I	P	1	2	2 Hrs	15/06	35/14	50/20	
	Material Science	IS02CMTS51	Materials Science II	T	2	2	1.5 Hrs	15/06	35/14	50/20	
		IS02CMTS52	Materials Science Practical II	P	1	2	2 Hrs	15/06	35/14	50/20	
	Electronics	IS02CELE51	Analog and Digital Electronics II	T	2	2	1.5 Hrs	15/06	35/14	50/20	
		IS02CELE52	Electronics Practical II	P	1	2	2 Hrs	15/06	35/14	50/20	
	Mathematics	IS02CMTH51	Elementary Algebra of Matrices	T	2	2	1.5 Hrs	15/06	35/14	50/20	
		IS02CMTH52	Problems and exercises in matrix algebra	P	1	2	2 Hrs	15/06	35/14	50/20	
	Statistics	IS02CAST51	Descriptive Statistics for Univariate Data II	T	2	2	1.5 Hrs	15/06	35/14	50/20	
		IS02CAST52	Practical on Descriptive Statistics for Bivariate Data	P	1	2	2 Hrs	15/06	35/14	50/20	
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