



**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))**  
**Syllabus with effect from the Academic Year 2022-2023**

**PROGRAMME STRUCTURE**  
**Master of Science in Material Science**  
**MSc (Material Science) Semester: IV**

Programme Outcome (PO) - For MSc Material Science Programme	Materials Science is an interdisciplinary subject of great importance. The syllabi in this program cover various aspects of physics, chemistry and engineering relevant to different types of materials. As the rapid progress is being made in the development of sophisticated tailor made materials of desired properties and specifications to suit specific needs, this program will help the students to be technologically sound with the scientific knowledge of chemical and physical sciences.
Programme Specific Outcome (PSO) - For MSc Material Science	<p>This program will help the students</p> <ul style="list-style-type: none"><li>➤ to strengthen their knowledge on the fundamental aspects of materials science</li><li>➤ to acquire knowledge on the properties of different types of materials</li><li>➤ to get acquainted with different experimental and technical methods used for the characterization of materials</li><li>➤ the area of applications where different tailor made materials can be used.</li></ul>
To Pass	At least 40% Marks in the University Examination in each paper and 40% Marks in the aggregate of University and Internal examination in each course of Theory , Practical & 40% Marks in Viva-voce.





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Course Type	Course Code	Name Of Course	Theory/ Practical	Credit	Exam Duration in hrs	Component of Marks		
						Internal	External	Total
						Total	Total	Total
Core Course	PS04CMTS51	Engineering Polymers	T	4	3	30	70	100
	PS04CMTS52	Selected Topics in Nanoscience and Nanotechnology	T	4	3	30	70	100
	PS04CMTS53	Optical, Magnetic and Dielectric Properties of Materials	T	4	3	30	70	100
	PS04CMTS54	Project Work		8	12	60	140	200
	PS04CMTS55	Comprehensive Viva		1	-	-	50	50
Elective Course (Any One)	PS04EMTS51	Materials and Environment	T	4	3	30	70	100
	PS04EMTS52	Ceramic Technology	T	4	3	30	70	100

