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 Statistics
MSc (QPM) Semester: III

Programme Outcome (PO) - For MSc **QPM** Programme	Master of Science program provides extended theoretical and practical knowledge of different science subjects. Master of Science programme at Sardar Patel University is designed keeping the overall back ground preparation in mind for the student to either seek a job or to become an entrepreneur. The students, after completion of Bachelor of Science can select the master's programme in the subject they have had at the final year or in a related discipline (depending upon eligibility criteria prescribed by university). **Programme outcomes: At the end of the program, the students will be able to** 1. Have a deep understanding of both the theoretical and practical concepts in the respective subject. 2. Understand laboratory processes and use scientific equipments and work independently. 3. Develop research temperament as a consequence of their theory and practical learning. 4. Communicate scientific information in oral and written form. 5. Understand the issues related to nature and environmental contexts and think rationally for sustainable development. 6. The students are able to handle unexpected situations by critically analyzing the problem.
Programme Specific Outcome (PSO) - For MSc **QPM** Semester III	This programme is intended to produce specialists in Quality Management with emphasis on Statistical Quality Control, Reliability, Operations Research, Computer Software and Management Systems. The programme is designed to offer adequate instruction in the theory and practice of the above disciplines. The objective is to equip students with the basic practical skills with sufficient theory to understand the principles involved in the application and to develop in them the power of systematic thinking and reasoning, practical approach and industrial exposition. On successful completion of this programme, the students will be able to: 1. Take up a professional career in the field of quality engineering and management in departments of government, semi-government, public/private sector undertakings, industrial organizations, consultancy agencies, and thereafter, pursue positions like Quality Control In charge, Quality Control Executive, Six Sigma Black Belt Champion, Management Representative, Research Associate, HR manager, Production Manager. 2. Progress for an academic career for further study and research in theoretical and applied aspects of Quality, Reliability and Operations research in organizations of higher learning and research institutions. 3. Apply Quality techniques tools in the Industry for International Certification. 4. To become a lean six sigma consultant and start his/her own enterprise and become an entrepreneur.

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

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.

Course Type	Course Code	Name Of Course	Theory/ Practical	Credit	Exam Duration in hrs	Component of Marks		
						Internal Total	**External** Total	**Total** Total
Core Course	PS03CQPM51	Total Quality Management	T	4	3	30	70	100
	PS03CQPM52	Knowledge Discovery and Data Mining	T	4	3	30	70	100
		OR						
	PS03CQPM58	Planning and Analysis of Industrial Experiments (Effect from June, 2024)	T	4	3	30	70	100
	PS03CQPM53	Operations Research - II	T	4	3	30	70	100
	PS03CQPM54	Design of Experiments	T	4	3	30	70	100
		OR						
	PS03CQPM59	Pattern Recognition (Effect from June, 2024)	T	4	3	30	70	100
	PS03CQPM55	Practicals	P	4	3	30	70	100
	PS03CQPM56	Practicals	P	4	3	30	70	100
	PS03CQPM57	Comprehensive Viva-Voce	P	1	=	==	50	50