



Charutar Arogya Mandal

**Medical Technology Courses
(Affiliated to Sardar Patel University)**

PROSPECTUS for Postgraduate Course M.Sc. - Medical Technology (in Perfusion Technology)

Objective:

To prepare health-care professionals of highest caliber in various diagnostic and therapeutic technologies used for the patient care with a strong foundation and complete orientation of relevant basic medical sciences and clinical subjects; so as to enable them to efficiently use / assist the specialist in using advanced medical technologies in a health-care set up.

About the Institute:

Smt. L.P. Patel Institute of Medical Laboratory, under the aegis of Charutar Arogya Mandal, Vallabh Vidyanagar, has been established at Shree Krishna Hospital & Pramukhswami Medical College, Karamsad to provide training, at its NABL-accredited clinical laboratories and NABH-accredited A.D.Gorwala Blood Bank, to the prospective candidates; who desire to pursue their post-B.Sc. carrier in the field of Medical diagnostics as Laboratory personnel in hospitals, clinical laboratories and Medical Research Centres.

The Institute has also introduced graduate courses, B.Sc.-Medical Technology, to impart training to the students in a variety of specializations such as clinical laboratory technology, Imaging Technology, Respiratory care Technology and Operation theatre & Anaesthesia Technology. It also offers post-graduate programmes, DMLT, M.Sc. and Ph.D. programme in Medical Technology (in Clinical lab Technology). Students are trained in the different departments at Shree Krishna Hospital; a well equipped tertiary care Hospital of Charutar Arogya Mandal.

The M.Sc.-Medical Technology (in perfusion Technology) course would be conducted at Charutar Arogya Mandal's **Bhanubhai and Madhuben Patel Cardiac Centre**, which is a state-of-the-art heart care center with a view to bringing to the people of Gujarat quality yet affordable cardiac care. The Centre provides services ranging from routine heart check-ups, emergency treatment, cardiac investigations, angiography, angioplasty, by-pass surgery, valve replacements, and several other cardiac procedures.

About the Course:

The M.Sc.-Medical Technology course in Perfusion Technology provides an opportunity to graduate students to pursue their career as a Perfusion Technologist or Perfusionist. During an open heart surgery, the cardiopulmonary bypass (or heart-lung) machine maintains the patient's life by taking over the functions of the heart and lungs. Perfusionists are highly skilled professionals who operate life-support equipment such as heart-lung machines, intra-aortic balloon pumps and ventricular assist devices in the operating room during an open heart surgery. In addition, perfusionists, in coordination with the surgeon and anesthesiologist, are responsible for regulating the patient's levels of oxygen and carbon dioxide; for measuring selected laboratory values such as blood cell count; and for monitoring circulation. At times, perfusionists administer anesthetic or other pharmaceutical agents through the cardiopulmonary bypass circuit.

Career Prospects:

Health Care Professionals, well trained in various Medical Technologies, have an extremely challenging and rewarding career ahead. Since the use of advanced technologies in the diagnosis and management of patients has greatly increased globally in recent years; and hence, requirement of trained and skilled manpower to assist in various diagnostic and therapeutic technologies has also been growing rapidly.

Perfusionists are particularly required by all Cardiac Institutes undertaking open-heart surgeries and with the increase in cardiac care facilities, the need and the avenues have also been increased for Clinical Perfusionists.

Duration, Seats available and Eligibility criteria for Admission:**M.Sc.-Medical Technology (Perfusion Technology)**

Duration: 2 years

Seats: 04 – Full-time

B.Sc. with Medical Laboratory Technology (any speciality) / Physics / Chemistry / Microbiology/ Bio Chemistry / Zoology / Botany / Bio Technology/ Genetics as principal subject OR B.Sc.(Nursing) OR an examination in any other university with 10+2+3(or 4) system recognized as equivalent to any of the above courses.

Medium of instruction:

The medium of instruction shall be English.

Commencement of Academic Term:

The academic session would usually commence from June; first term would be from June to November and second term from December to May or as decided by Sardar Patel University.

Working hours:

Working hours of the course will be from 09.00 a.m to 05.00 p.m with one-hour lunch break. Candidates, however, may be posted during emergency duty hours as a part of their training under the supervision of senior personnel.

Attendance:

Candidate shall be required to attend at least 75% of the Lectures and Practicals separately in each year.

Payment of Tuition fee (INR)

Course	1st Year	2nd Year	Total
M.Sc.-Medical Technology (Perfusion Technology)	Rs. 75,000/-	Rs. 75,000/-	Rs. 1,50,000/-

Students admitted to the courses shall pay non-refundable fees annually at the beginning of each year as per the approved fee structure. All the students would undertake to abide by the schedule of payment of fees.

Refund of fees:

Generally, no refund of the fees paid is permitted on account of withdrawal/cancellation of the admission. In case a candidate wishes to withdraw from the course after admission, but before the commencement of the course, s/he should apply at least 15 days prior to the date of commencement of classes. The refund of the fees, after deducting the applicable administrative charges, as decided by the competent authority, is subject to filling of the seat by a wait-listed candidate.

Accommodation:

Shared accommodation at the hostels on campus is provided to limited students on payment basis. Admission to the course does not, however, guarantee hostel accommodation.

Medical Insurance:

Students admitted would be covered under a suitable scheme of “Krupa Arogya Suraksha” for hospitalization at the Shree Krishna Hospital, Karamsad for a coverage of Rs.10,000/- per annum or as decided from time to time.

Internet Facilities:

Central Internet facilities are made available to all the students at college Library/surfing room on payment of nominal charges.

Discipline:

All the students are expected to maintain strict discipline on the campus and adhere to rules and regulations particularly in relation to their overall conduct, academic performance and attendance through out their academic tenure.

“Ragging” is categorically banned in the institution as per the Judgment of Supreme Court of India. Any one indulging in ragging or any kind of indiscipline is likely to be punished appropriately, which may include expulsion from the institution.

Sports & Recreation:

Facilities for indoor and outdoor games are available on campus at the Student Activity Center along with a well-equipped gymnasium at nominal charges.

Course subjects, Examination System & Mark Distribution:**M.Sc. – Medical Technology (Perfusion Technology)**

Course code	Name of Paper	Marks		Total	Exam Duration
		Internal	External		
M.Sc Part I (at the end of first year)					
MPFT - 101	Perfusion Technology- Foundation	20	80	100	3 hours
MPFT - 102	Introduction to Perfusion Technology	20	80	100	3 hours
MPFT-103(P)	Perfusion Technology-Practical/Oral	30	120	150	1 day
Total		70	280	350	
M.Sc Part II (at the end of second year)					
MPFT-201	Perfusion Technology – Clinical	20	80	100	3 hours
MPFT-202	Perfusion Technology – Applied	20	80	100	3 hours
MPFT-203	Perfusion Technology – Advanced	20	80	100	3 hours
MPFT-204(P)	Perfusion Technology-Practical/Oral	40	160	200	1 day
–	Dissertation Viva	–	–	50	During Practical exam
Total		100	400	550	
Grand Total (M.Sc. Part I & II)		170	680	900	

Standard of passing:

To pass the M.Sc. examination, a candidate must obtain at least **45% marks** (aggregate of external and internal) in each of the theory papers as well as in practical **separately**.

Award of degree/diploma:

On successful completion of the programme, students will be awarded the degree of M.Sc.- Medical Technology (Perfusion Technology) from Sardar Patel University, Vallabh Vidyanagar-388 120, Gujarat, India

Production of No Due certificate:

On successful completion of the course the students are required to submit a “No Due Certificate” from Library and other concerned department / Hostel, in case of residing at hostel, to enable them to receive the University mark sheet and other dues, if any, from the institute.

How to apply:

1. The Prospectus & Application form are available at the Student Section, Smt. L.P.Patel Institute of Medical Laboratory Technology. P.S. Medical College Campus, Karamsad – 388 325, Gujarat, India on payment of Rs.300 by cash. (No additional payment is required at the time of submitting duly filled application form available with prospectus).
2. The Prospectus & Application form can also be downloaded from our website www.charutarhealth.org. The downloaded application form, duly filled up, must be submitted along with all the required documents and a D.D. of Rs 300 to be drawn in favour of “Charutar Arogya Mandal” payable at Anand.
3. Admission Procedure: Candidates should submit the prescribed application form duly completed along with attested photocopies of requisite documents. Selection of the candidates will be based on the performance in an aptitude test / personal interview conducted on a specified date intimated to the candidate.

Completed Application form should be submitted to:

The Principal,

Smt. L.P.Patel Institute of Medical Laboratory Technology.

P.S. Medical College Campus,

Karamsad – 388 325,

Gujarat, India

Contact details:

Phone: (02692) 222130,222567, ext.3500

Fax: (02692) 223466

E mail: lppimlt@charutarhealth.org

website: www.charutarhealth.org