### SUMANDEEP VIDYAPEETH

(Declared as Deemed to be University under Section 3 of the UGC Act 1956)

Accredited by NAAC with a CGPA of 3.53 out of four-point scale at 'A' Grade Category – I deemed to be university under UGC Act - 2018

At & Post Piparia, Tal: Waghodia 391760 (Gujarat) India.

At & Post Piparia, Tal: Waghodia 391760 (Gujarat) India. Ph: 02668-245262/64/66, Telefax: 02668-245126, Website: www.sumandeepvidyapeethdu.edu.in



# CURRICULUM Master of Science (M.Sc) PERFUSION CARE TECHNOLOGY

Attested CTC

Vice-Chancellor

Sumandeep Vidyapeeth An Institution Deemed to be University VIII. Piparia, Taluka: Waghodia. Dist. Vadodara-391 760. (Gujarat)

deep Vidyoo on the North Control of the Political Control of the Politi

Mandama 10/.

**AMENDED UP TO DECEMBER -2020** 

Colivers



#### INTRODUCTION

#### Scope

The quality of paramedical care has improved tremendously in the last few decades due to the advances in technology, thus creating fresh challenges in the field of healthcare. It is now widely recognized that health service delivery is a team effort involving both clinicians and non-clinicians, and is not the sole duty of physicians and nurses. Professionals that can competently handle sophisticated machinery and advanced protocols are now in high demand. In fact, diagnosis is now so dependent on technology, that paramedical and healthcare professionals are vital to successful treatment delivery.

Effective delivery of healthcare services depends largely on the nature of education, training and appropriate orientation towards community health of all categories of health personnel, and their capacity to function as an integrated team, with a range of skills and expertise, play key roles within the National Health Service, working autonomously, in multi-professional teams in various settings. All of them are first-contact practitioners and work across a wide range of locations and sectors within acute, primary and community care.

#### Learning goals and objectives for paramedical healthcare professionals

The learning goals and objectives of the undergraduate and graduate education program will be based on the performance expectations. They will be articulated as learning goals (why we teach this) and learning objectives (what the students will learn). Using the framework, students will learn to integrate their knowledge, skills and abilities in a hands-on manner in a professional healthcare setting.

#### **Program outcomes**

- The objective is to train a candidate so as to ensure higher competence in both general and special
- Area of interest and prepare him/her for a career in teaching, research and specialty practice.
- Candidate must achieve a high degree of professional proficiency in the subject matter and develop
- Competence in research and its methodology as related to the field concerned.

#### **Ethics and accountability**

Students will understand core concepts of clinical ethics and law so that they may apply these to their practice as healthcare service providers. Program objectives should enable the students to:

#### Attested CTC

- Describe and apply the basic concepts of clinical ethics to actual cases and situations
- Recognize the need to make health care resources available to patients fairly, equitably and without bias, discrimination of single-induced

Vice-Chancellor
Sumandeep Vidyapeath
I Institution Deemed to be University
VIII. Piperia, Teluter Waghodia.

Dist. Vadodara-391 760. (Gujarat)

to be

- Demonstrate an understanding and application of basic legal concepts to the practice 
   Employ professional accountability for the initiation, maintenance and termination of patient-provider relationships
- Demonstrate respect for each patient's individual rights of autonomy, privacy, and confidentiality

#### Commitment to professional excellence

The student will execute professionalism to reflect in his/her thought and action a range of attributes and characteristics that include technical competence, appearance, image, confidence level, empathy, compassion, understanding, patience, manners, verbal and non-verbal communication, an anti-discriminatory and non-judgmental attitude, and appropriate physical contact to ensure safe, effective and expected delivery of healthcare.

#### **Duration of the course:**

Duration of the course is two years

Eligibility criteria: Bachelors in Perfusion Care Technology

#### Attendance:

A candidate has to secure minimum 80% attendance in overall with at least-

- 1. 75% attendance in theoretical
- 2. 80% in Skills training (practical) for qualifying to appear for the final examination.

No relaxation, whatsoever, will be permissible to this rule under any ground including indisposition etc.

#### **Medium of instruction:**

English shall be the medium of instructions for all the subjects of study and for examination of the course.

#### Assessment:

Assessments should be completed by the academic staff, based on the compilation of the student's theoretical & clinical performance throughout the training program me. To achieve this, all assessment forms and feedback should be included and evaluated. Student must attain at least 50% marks in each Theory, Internal assessment and Practical independently / separately for each individual subject.

#### **Course of Instruction:**

Course Name	Course Code	Theory (In hrs.) (Class and lab)	Practical (In hrs.) (Clinical)	Total (in Hours)
First Year - Total Hours 650				
-Core				
Cu. Giology	MPCT101	50	50	100
Cardiac Surgery	MPCT102	50	50	100
ntroduction to OT & Perfusion	MPCT103	e800 Vidy	150	250
Technology	[S]			

Vice-Chancellor

Sumandeep Vidyapeeth
I Institution Deemed to be University

VIII. Piparia, Taluta: Waghodia. Dist. Vadodara-391 760. (Gujarat)

Equipment's in Perfusion	MPCT104	50	100	150
Technology & Physiology &				
Pathology of Perfusion				
Pharmacology of	MPCT105	50	-	50
Cardiovascular Drugs				
Total		300	350	650

#### Scheme of Examination:

Course Name	Course Code	Theory (In hrs.) (Class and lab)	Practical (In hrs.) (Clinical)	Total (in Hours)	
Second Year - Total Hours 450					
Core					
Clinical Applications of Perfusion Technology	MPCT201	50	50	100	
Cardiac Surgery Without CPC Mechanical Circulatory Support & Robotic Cardiac Surgery	MPCT202	50	50	100	
Organ Transplantation	MPCT203	50	100	150	
Hematology as Relevant to Perfusion, Blood Transfusion And Blood Conservation	MPCT204	50	100	150	
Total		250	300	450	

Each student shall undergo training in Skill Simulation Laboratory for learning certain basic clinical skills like IV/IM injection, setting IV-line, Cardio-pulmonary resuscitation (CPR), and Life support skills in the beginning of second year, for duration of continuous four days. (Board of Studies letter No. FPMS/SV/BOS-MIN/0006/2016-17, dated 19/04/2017, and vide notification of Board of Management resolution Ref.: No. SVDU/R/2017-18/5056, dated 09/01/2018).

## **Code of Professional Conduct INTRODUCTION**

The Code of Professional Conduct is designed and set out as guidance for clinical practitioner within the relationship that exists with every patient receiving health care.

Essential to that relationship is the patient's trust in the practitioner. This trust hangs upon the patient's assurance of being the practitioner's first concern during their clinical encounter, and upon the patient's confidence that the care received will be competent, whether in diagnosis, therapy or counseling.

STANDARD OF PRACTICE AND CARE

Patiens are entitled to the highest standard of practice and care. The essential elements of

Vice-Chancellor
Sumandeep Vidyapeeth
I Institution Deemed to be University
Will Piperia, Telular Waghodia.

Dist. Vadodara-391 760. (Gujarat)

this are professional competence, good relationships with patients and colleagues and observance of professional ethical obligations.

In providing care you must therefore:

- Recognise the limits of your professional competence.
- be willing to consult colleagues
- Keep clear, accurate and contemporaneous patient records which report the relevant findings.
- Keep colleagues informed.
- Pay due regard to the efficacy and the prudent use of resources.
- be competent, truthful, and accurate, when reporting on investigations.
- be competent when giving or arranging treatment.

#### **Patients' Rights**

- Listen to patients and respect their views.
- Treat patients politely and considerately.
- Respect patients' privacy and dignity.
- Give information to patients in a way they can understand.
- Respect the right of patients to be fully involved in decisions about their care.
- Respect the right of patients to refuse treatment or to take part in teaching or research, reporting the refusal to the person requesting the procedure.
- Respond to complaints promptly and constructively.
- Ensure that your views about a patient's life style, culture, beliefs, race, colour, sex, sexuality, age, social status, or perceived economic worth, do not prejudice the service you give.

#### **CONFIDENTIALITY**

Patients have a right to expect that you will not pass on any personal information which you learn in the course of your professional duties, unless they agree.

#### **DUTY TO PROTECT PATIENTS**

You have a duty to protect patients if you believe that a colleague's conduct, performance, or health, is a threat to them.

Before taking action, you should do your best to find out the facts. Then, if necessary, you must tell someone from the employing authority or from a regulatory body. Your comments about colleagues must be honest. If you are not sure what to do ask an experienced colleague. The safety of patients must come first at all times.

Attested CTC

Vice-Chancellor

Sumandeep Vidyapeeth
An Institution Deemed to be University
Vill. Piparia, Taluka: Waghodia.

Dist. Vadodara-391 760. (Gujarat)