

# 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

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

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## CURRICULUM

### Master of Science (M.Sc)

### PERFUSION CARE TECHNOLOGY

Attested CTC

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15/2/2021

Vice-Chancellor

Sumandeep Vidyapeeth

An Institution Deemed to be University

Vill. Piparia, Taluka: Waghodia.

Dist. Vadodara-391 760. (Gujarat)

2016



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## 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:

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- 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 or undue influence

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- 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)
<b>First Year - Total Hours 650</b>				
<b>Core</b>				
Cardiology	MPCT101	50	50	100
Cardiac Surgery	MPCT102	50	50	100
Introduction to OT & Perfusion Technology	MPCT103	100	150	250

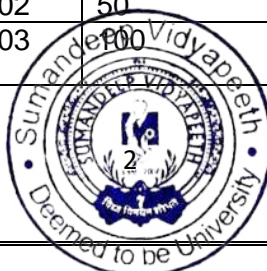
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Equipment's in Perfusion Technology & Physiology & Pathology of Perfusion	MPCT104	50	100	150
Pharmacology of Cardiovascular Drugs	MPCT105	50	-	50
<b>Total</b>		<b>300</b>	<b>350</b>	<b>650</b>

### Scheme of Examination:

Course Name	Course Code	Theory (In hrs.) (Class and lab)	Practical (In hrs.) (Clinical)	Total (in Hours)
<b>Second Year - Total Hours 450</b>				
<b>Core</b>				
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
<b>Total</b>		<b>250</b>	<b>300</b>	<b>450</b>

### 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

Patients are entitled to the highest standard of practice and care. The essential elements of this are professional competence, good relationships with patients and colleagues and observance of professional ethical obligations.

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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

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- 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.



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