



**INSTITUTE OF HEALTH CARE MANAGEMENT AND DEVELOPMENT,  
PESHAWAR**

**IN**

**COLLABORATION WITH HEALTH SERVICES ACADEMY ISLAMABAD (DEGREE  
AWARDING INSTITUTE, GOVERNMENT OF PAKISTAN)**

# Post Graduate Diploma in Respiratory Therapy

---

## ***Program Description***

Respiratory Therapists are health care specialists who work with a variety of patients suffering from cardiopulmonary disorders. Working as part of the healthcare team, respiratory therapists assist in the evaluation, treatment, management, and rehabilitation of these disorders. Patients treated by respiratory therapists range from premature infants to the elderly. Therapists enjoy tremendous opportunity for diversity in their practices. Working in hospitals, diagnostic labs, clinics, and home care; respiratory therapist fill a vital role in our nation's health care system.

## ***Program Outcomes***

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory care practice as performed by registered therapists (RRT's).

## ***Program Accreditation***

The Respiratory Therapy Program is accreditation with Health Services Academy, Ministry of National Health Services Regulations and Coordination, Government of Pakistan.

## **Course Module for Post Graduate Diploma in Respiratory Therapy**

### **1 Year Program (2 Semesters)**

Session No.	Module	Credit Hours
1	Introduction to Respiratory therapy	3+0
2	Pulmonary Anatomy & Physiology	3+0
3	Pulmonary Diseases	3+0
4	Airway Management (Non-invasive)	2+1
5	Arterial Blood Gas Analysis & monitoring	2+1
6	Clinical Practice	1+1
<b>Examination</b>	<b>Total Credit Hours</b>	<b>17</b>

**Note: In Each Module (1<sup>st</sup> Semester) which is divided into 2 sub Modules (1,2,3 and 4,5,6) and have an exam, after Passing the 1<sup>st</sup> Module with 60% Marks student will be eligible for 2<sup>nd</sup> Module, Failure in 1<sup>st</sup> Module then student will not be entertaining in 2<sup>nd</sup> Module.**

Session No.	Module	Credit Hours
1	Invasive Ventilation (intubation, tracheostomy)	2+1
2	Sedatives and relaxants use in Mechanical ventilation	2+1
3	Modes of Mechanical Ventilation	2+1
4	Ventilator Graphs & its interpretation	2+1
5	Ventilators Trouble Shooting	2+1
6	Clinical Practice	1+1
<b>Examination</b>	<b>Total Credit Hours</b>	<b>17</b>

## **Course Content:**

### **1.1 Introduction to Respiratory therapy (3+0):**

- Roles and scope of respiratory therapy
- Patient safety
- Infection prevention
- Patient hygiene
- History & Physical examination

### **1.2 Pulmonary Anatomy & Physiology (3+0):**

- Anatomy of respiratory system
- Physiology of respiratory system
- Lungs mechanics (Volumes and Capacities)
- Gaseous exchange and transport of respiratory gases
- Spirometry



### 1.3 Pulmonary Diseases (3+0):

- Asthma
- COPD
- Pneumonia
- ARDS
- Pneumothorax, hemothorax

### 1.4 Airway Management (Non-invasive) (2+1):

- Medical gases supply, cylinders and pipeline
- Types of oxygen masks and airways
- Advance airway devices (ETT, LMA, Tracheostomy tube, AMBU bag, Breathing Circuits)
- CPAP
- BIPAP

### 1.5 Arterial Blood Gas Analysis and Patients monitoring (2+1):

- Acid base balance
- ABGs taking and interpretation
- Vitals monitoring and their impact on respiration
- Invasive monitoring devices insertion technique (Arterial line, CVP line)
- Airway assessment (predicting tests)

### 2.1 Invasive Ventilation (intubation, tracheostomy) (2+1):

- Indication of invasive ventilation
- Techniques of intubation
- Indication of tracheostomy
- Tracheostomy care
- Suctioning

### 2.2 Sedatives and relaxants use in Mechanical ventilation (2+1):

- Induction agents (Propofol, Ketamine, etomidate)
- Benzodiazepine
- Opioids
- Muscles relaxants
- Bronchodilators



### 2.3 Modes of Mechanical Ventilation (2+1):

- Pressure control vs volume control
- Assist control ventilation
- SIMV and PSV
- Weaning and extubation

### 2.4 Ventilator Graphs & its interpretation (2+1):

- Plethysmograph
- Pressure volume graph
- Flow volume graph
- Capnograph

### 2.5 Ventilators Trouble Shooting (2+1):

- Alarms
- Driving and peak pressures
- Auto PEEP
- Inspiratory and expiratory pause
- Pneumothorax identification and management

<p style="text-align: center;"><b><u>PAPER</u></b> <b><u>PATTERN</u></b></p>	<ul style="list-style-type: none"><li>• Each semester has Four modules; each module will have 100 marks (MCQ's).</li><li>• Each exam will be conducted after 3 months' session</li><li>• The candidate will be promoted to the next session after clearing the prior one.</li><li>• At the end of each semester, a viva of 100 marks will be taken.</li></ul>
--	---

### **Eligibility:**

- BS Emergency Care Technology
- BS Intensive Care Technology
- BS Anesthesia Technology
- BS Health Technology



## **Program Fee: Rs 100,000/-**

- **Address:** Institute of Health Care Management and Development, (Imperial Education System Building) Opposite Roots Millennium Schools System Gul abad, Phase-III Chowk Jamrud Road Peshawar.

For Further Detail Please contact.

**Director / Program Coordinator**

**Email: ihcmd.hsa.edu.pk@gmail.com**

**www.ihcmd.com.pk**

**Cell # 0332-5257379**

