

ECMO & Critical Care Nursing Fellowship

(One Year Course)

ECMO & Critical care Medicine Department of K K Patel Super Speciality Hospital, Bhuj, Gujarat (an Extracorporeal Life Support Organization & ECMO SOCIETY OF INDIA REGISTERED CENTRE)
ELSO SILVER LEVEL ECMO CENTER

Course Affiliated with Critical Care Nursing Society(CCNS)

Registration No 2968

(Associate Member of World Federation Care Nurse

Member Regional Federation Of CRITICAL Care Nurse , SAARC Countries)

Fellowship Program Director: Dr. Aravind Chandrasekaran,
MD Anaes (JIPMER), DrNB (Critical Care Medicine), EDIC (European Diploma in Intensive Care Medicine-ESICM) E-AEC (ELSO - Adult ECMO Certification)
ECMO Program Director & Consultant Critical Care Specialist (Superspecialty)

Fellowship Program Co-ordinator: Mr. Poona Ram,
ICU Nursing Incharge & ECMO Program Co-ordinator
(GNM, PBBSc Nursing, Comprehensive Simulation – Based Adult ECMO Course ELSO Endorsed, ACLS, RSCIT)

Course Duration: One Year

Start Date: 01 May 2026 **End Date:** 30 April 2027

Objective:

The **One Year ECMO & Critical Care Nursing Fellowship Program** is specifically designed to provide registered nurses with the specialized knowledge and advanced skills required to manage critically ill patients in high-acuity clinical environments. This program ensures that upon completion, participants are fully equipped to provide critical care in intensive care units (ICUs), emergency departments, and other specialized care settings, improving patient outcomes and contributing to life-saving practices.

Course Highlights:

- **Eligibility:**
 - Registered Nurses with [specific qualification, B.sc / Post Basic B.sc Nursing]
 - Minimum 01 years ICU experience required
- **Duration:**
 - One Year of intensive theoretical, practical, and clinical training
- **Mode of Instruction:**
 - Combination of classroom lectures, hands-on practical sessions, and clinical rotations in various critical care settings.
- **Admission Process:**
 - **Screening:** Multiple-choice question exam
 - **Interview:** Personal or video conference interview to assess the candidate's passion and experience in critical care nursing.

Course Content:

1. Foundational Training:

- Introduction to Critical Care Nursing
- Advanced Airway Management and Cardiovascular Support
- Pharmacology in Critical Care Settings
- Infection Control and Ethical Considerations in ICU

2. Specialized Critical Care Knowledge:

- Extracorporeal Membrane Oxygenation (ECMO) and CRRT
- Advanced Hemodynamic Monitoring (PiCCO)
- Trauma & Emergency Care in Critical Settings
- Invasive Line Management and Post-Operative Care

3. Life-Support and Therapies:

- Ventilation modes and Mechanical Ventilation management
- Renal Replacement Therapy and ECMO protocols
- Advanced Cardiac Support (IABP)

4. Patient Management in Specialized Units:

- Post-cardiac surgery care
- Bone Marrow Transplant care protocols
- Isolation care for immunocompromised patients
- Pediatric and Geriatric Critical Care

5. Ethics & Communication:

- Professional communication in critical care settings
- Decision-making and team-based care in multidisciplinary ICU environments
- Self-care strategies and burnout prevention for nurses

More Course Content

- 1. Introduction to Critical Care Nursing***
- 2. Advanced Airway Management***
- 3. Cardiac Monitoring and Management***
- 4. Pharmacology in Critical Care***
- 5. Trauma and Emergency Care***
- 6. Infection Control in ICUs***
- 7. Ethical Considerations in Critical Care***
- 8. Extracorporeal Membrane Oxygenation (ECMO)***
- 9. Continuous Renal Replacement Therapy (CRRT)***
- 10. Advanced Hemodynamic Monitoring (PiCCO)***
- 11. Invasive Line Care***
- 12. Assisting ICU Procedures***
- 13. Advanced Ventilation Modes***
- 14. Critical Care Pharmacology***
- 15. Nutritional Support in Critical Care***
- 16. Psychological Aspects of Critical Care***
- 17. Bone Marrow Transplant Patient Care***
- 18. Isolation Care for Immunocompromised Patients***
- 19. Post-Cardiac Surgery Care***
- 20. Post-ECMO Patient Care***
- 21. Medical ICU Patient Care***
- 22. IABP (Intra-Aortic Balloon Pump) Procedure and Management***
- 23. Airway Clearance Techniques in Critically Ill Patients***
- 24. Management of Acute Respiratory Distress Syndrome (ARDS)***
- 25. Management of Shock States (Septic, Cardiogenic, Hypovolemic, Neurogenic)***
- 26. Management of Sepsis and Septic Shock***
- 27. Continuous Monitoring and Management of ARDS***
- 28. Blood Gas Analysis and Interpretation***
- 29. Management of Dysrhythmias in ICU Patients***
- 30. Pain and Sedation Management in the ICU***
- 31. Blood Transfusion Protocols in ICU***
- 32. Advanced Management of Acute Myocardial Infarction (AMI)***
- 33. Management of Acute Stroke in the ICU***

- 34. Advanced Neurological Monitoring (ICP, EEG)***
- 35. Management of Acute Kidney Injury (AKI) and Dialysis***
- 36. Hemodialysis in the ICU***
- 37. Ventilator-Associated Pneumonia (VAP) Prevention and Management***
- 38. Triage and Initial Management of Mass Casualty Patients***
- 39. Surgical ICU (SICU) Patient Management and Post-Operative Care***
- 40. Management of Ventilated Patients in Medical ICU***
- 41. Advanced Invasive Monitoring Techniques (CVC, Swan-Ganz, PiCCO, TEE)***
- 42. Advanced Fluid and Electrolyte Management in ICU***
- 43. Management of Post-Surgical Complications (Bleeding, Infections, Sepsis)***

Training Topics:

Invasive Line Management:

- Central Venous Catheter (CVC), Arterial Lines, Pulmonary Artery Catheter (PAC), and Dialysis Catheters
- PiCCO line management and complications

Critical Care Concepts:

- Sepsis and MODS management
- Acid-Base Imbalances
- Post-ECMO, post-IABP, and Bone Marrow Transplant Care

Ventilation & Life-Support Systems:

- Advanced Ventilation Modes: PSV, APRV, HFOV
- Non-invasive and invasive mechanical ventilation techniques
- Prone positioning for ARDS management

Specialized Critical Care Skills:

- Trauma & Burn Management
- Invasive procedures: Intubation, Thoracostomy, and Tracheostomy care
- Post-cardiac arrest care protocols

- **Clinical Rotations:**
Participants will undertake rotations in high-stakes settings like:

- Intensive Care Units (ICUs)
- Emergency Departments (ED)

- Specialized Units (Cardiac ICU,, Bone Marrow Transplant)
- Dialysis and Trauma Units
- Post-operative Care Units

Certification:

Upon successful completion of the program, participants will be awarded a **ECMO & Critical Care Nursing Fellowship Program** by *K K Patel Super Speciality Hospital*, **(Course Affiliated with Critical Care Nursing Society)** in collaboration with Dr. Aravind Chandrasekaran and Mr Poona Ram.

Course Fee:-

The fee for the full One Year program is ₹ 30000/- which includes all course materials, clinical exposure, and certification. **Stipend will be paid according to experience**

How to Apply:

To apply, please visit our official website at <https://www.kkphospital.org/> or (used this link https://docs.google.com/forms/d/e/1FAIpQLSctercwQj-0NHRFOrrUVMTYCPEZrELt0_8MMf33qFxPk7ZMoq/viewform?usp=publish-editor) or scan this QR code. Ensure you meet the eligibility requirements before applying.



Contact Information:

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Deadline for Application:- 25 April 2026 (First Batch)

This program is a unique opportunity for registered nurses to deepen their knowledge and gain hands-on expertise in critical care. We encourage all interested candidates who meet the eligibility criteria to apply for this prestigious diploma course.