LABORATORY (COURSE SPECIFIC) State-of-the-Art Simulation Lab at Malla Reddy University

The **dedicated Simulation Lab** at the **School of Allied & Healthcare Sciences, Malla Reddy University, Hyderabad**, is a cutting-edge training facility designed to provide MSc Anaesthesia & Operation Theatre Technology (AOTT) students with hands-on clinical experience in a **safe and controlled environment**. This advanced lab bridges the gap between theoretical learning and real-world clinical practice, ensuring that students are well-prepared for patient care in high-pressure surgical settings.



At Malla Reddy School of Allied & Healthcare Sciences, we take pride in our well-equipped, modern laboratories designed to provide hands-on training and enhance the practical skills of our students in MSc Anaesthesia & Operation Theatre Technology.

Our laboratories are equipped with **modern anaesthesia workstations, high-fidelity patient simulators, ventilators, defibrillators, infusion pumps, multi-parameter monitors, and advanced airway management devices.** These resources enable students to develop handson expertise in various anaesthesia techniques, patient monitoring, and operation theatre protocols.

We also provide **simulation-based training** with **virtual reality** (**VR**) **modules and task trainers** that allow students to practice intubation, central venous catheterization, arterial line insertion, and regional anaesthesia techniques in a controlled, risk-free environment.



Comprehensive Training & Hands-On Learning

Students undergo **structured practical sessions and skill development workshops** under the mentorship of experienced faculty members and clinical experts. The training curriculum includes:

Preoperative Assessment & Patient Evaluation – Learning how to assess patient conditions before administering anaesthesia.

Anaesthetic Techniques – Mastering general anaesthesia, regional anaesthesia (spinal, epidural, nerve blocks), and conscious sedation techniques.



Airway Management – Hands-on practice with supraglottic airways, endotracheal intubation, fiberoptic bronchoscopy, and difficult airway management.

Operation Theatre Protocols & Infection Control – Understanding sterile techniques, OT instrumentation, and aseptic precautions.

Patient Monitoring & Critical Care – Training on haemodynamic monitoring, ECG interpretation, ventilator management, and emergency response.

Cardiopulmonary Resuscitation (CPR) & Emergency Management – BLS & ACLS certification programs to prepare students for real-life medical emergencies.



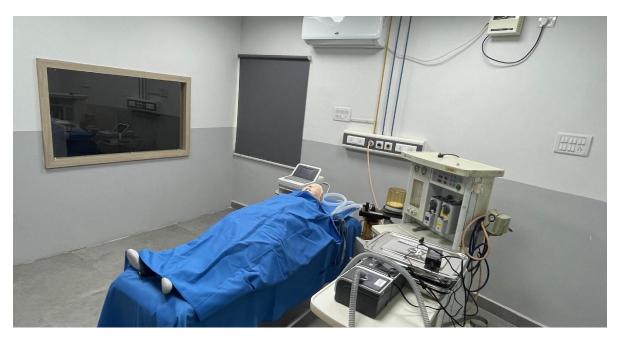


Key Features of the Simulation Lab

High-Fidelity Patient Simulators – Our lab is equipped with advanced manikins that mimic real-life patient responses, enabling students to practice anaesthesia administration, airway management, and emergency interventions.

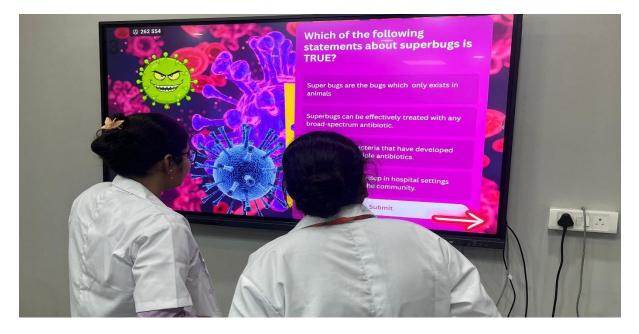


Modern Anaesthesia Workstations – Students train on state-of-the-art anaesthesia machines, ventilators, and monitoring systems, gaining expertise in managing patients under various surgical conditions.



Surgical & Emergency Training Models – Specialized models help students practice procedures like intubation, intravenous access, spinal anaesthesia, and patient positioning for surgeries.

Interactive Learning & Scenario-Based Training – Realistic clinical scenarios are simulated, allowing students to experience various surgical emergencies, teamwork coordination, and decision-making under expert faculty supervision.



Skill Enhancement Before Clinical Postings – By training in a simulated environment, students build confidence and competence before working in live operation theatres at Malla Reddy Hospital and other affiliated healthcare centers.



The **Simulation Lab at Malla Reddy University** is an essential part of the MSc AOTT program, ensuring students receive **world-class training** in anaesthesia and surgical procedures. It fosters hands-on skill development, critical thinking, and professional excellence, preparing graduates for successful careers in operation theatre technology.