

FELLOWSHIP IN MINIMAL INVASIVE CARDIAC SURGERY

ABOUT THE UNIVERSITY

Malla Reddy Vishwavidyapeeth is a reputed educational institution located in Hyderabad, Telangana, India. Recognized as a “Deemed to be University under Distinct (Existing) Category,” the university offers multidisciplinary programs across medical, dental, nursing, pharmaceutical sciences, engineering, and allied health sciences. The institution emphasizes academic excellence, clinical proficiency, innovation, and global collaborations, contributing significantly to advanced healthcare education and training.

PROGRAM OVERVIEW

The Fellowship in Minimal Invasive Cardiac Surgery is a specialized program designed to develop expertise in advanced cardiac surgical procedures performed through minimally invasive techniques.

The program focuses on:

- Principles of minimally invasive cardiac surgery
- Small incision and thoracoscopic cardiac procedures
- Valve repair and replacement techniques
- Coronary artery bypass (minimally invasive CABG)
- Endoscopic and robotic-assisted cardiac surgery
- Enhanced recovery and reduced surgical trauma approaches

The program integrates **surgical training, clinical exposure, and hands-on experience**, ensuring advanced competency in minimally invasive cardiac surgery.

(Deemed to be University)

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Perform minimally invasive cardiac surgical procedures effectively.
 2. Apply advanced surgical technologies including endoscopic and robotic techniques.
 3. Manage perioperative care in minimally invasive cardiac surgery.
 4. Deliver safe, evidence-based, and patient-centered cardiac surgical care.
-

PROGRAM OUTCOMES (POS)

1. **Clinical Expertise:** Diagnose and manage cardiac surgical conditions requiring intervention.
 2. **Surgical Skills:** Perform minimally invasive procedures such as valve surgeries and CABG.
 3. **Technological Proficiency:** Utilize endoscopic and robotic surgical systems.
 4. **Perioperative Care:** Manage pre-operative, intra-operative, and post-operative care.
 5. **Patient Safety:** Ensure reduced complications and faster recovery through minimally invasive approaches.
 6. **Multidisciplinary Approach:** Collaborate with cardiologists, anesthesiologists, and ICU teams.
 7. **Evidence-Based Practice:** Apply current guidelines in cardiac surgery.
-

COURSE OUTCOMES (COS)

- **CO1:** Understand principles of minimally invasive cardiac surgery.
 - **CO2:** Perform minimally invasive cardiac procedures.
 - **CO3:** Apply endoscopic and robotic surgical techniques.
 - **CO4:** Manage perioperative and ICU care.
 - **CO5:** Ensure optimal patient outcomes and recovery.
-

PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate expertise in minimally invasive cardiac surgical techniques.
 2. Apply advanced surgical technologies effectively.
 3. Integrate multidisciplinary approaches in cardiac surgical care.
-

PROGRAM DETAILS

- **Certificate Awarded by:** Malla Reddy Vishwavidyapeeth
 - **Program Duration:** One-Year Fellowship
 - **Mode of Delivery:** Surgical Training + Clinical Exposure + Theoretical Learning
-

ELIGIBILITY CRITERIA

- **Academic Qualification:** MBBS with MCh/DNB in Cardiothoracic & Vascular Surgery (CTVS) or equivalent
 - **Professional Requirement:** As per institutional norms
-

KEY FEATURES

- Advanced training in minimally invasive cardiac surgery
 - Hands-on exposure to thoracoscopic and endoscopic procedures
 - Training in valve repair, replacement, and minimally invasive CABG
 - Exposure to robotic-assisted cardiac surgery
 - Focus on enhanced recovery and reduced surgical trauma
 - Integration of surgery with advanced technologies
 - Evidence-based clinical practice
-

LEARNING OUTCOMES

KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of minimally invasive cardiac surgical techniques.
-

COGNITIVE SKILLS

- Clinical decision-making in advanced cardiac surgical procedures.
-

PRACTICAL & PROFESSIONAL SKILLS

- Proficiency in minimally invasive and robotic cardiac surgeries.
 - Hands-on experience in operating theatres and ICU settings.
-

TRANSFERABLE SKILLS

- Team coordination and communication in surgical environments.
 - Clinical documentation and perioperative management.
-

SUBJECT-SPECIFIC SKILLS

- Advanced minimally invasive cardiac surgical techniques and technologies.
-

CURRICULUM MODULES – THEORY

- Principles of Minimally Invasive Cardiac Surgery
- Thoracoscopic and Endoscopic Techniques
- Minimally Invasive Valve Surgery
- Minimally Invasive CABG
- Robotic Cardiac Surgery
- Cardiopulmonary Bypass in Minimally Invasive Surgery
- Perioperative and ICU Management
- Complications and Risk Management
- Patient Recovery and Rehabilitation
- Advances in Cardiac Surgery

PRACTICAL COURSEWORK

- Hands-on training in minimally invasive cardiac surgery units
- Observation and assistance in thoracoscopic and robotic procedures
- Valve repair and coronary bypass procedures
- Perioperative and ICU patient management
- Surgical planning and patient evaluation
- Case discussions and multidisciplinary coordination
- Case documentation and clinical evaluation

CAREER OUTCOMES

Graduates of the Fellowship in Minimal Invasive Cardiac Surgery can pursue careers as:

- Minimally Invasive Cardiac Surgeon
- Cardiothoracic Surgeon (Advanced Techniques)
- Cardiac Surgical Consultant
- Clinical Practitioner in Tertiary Cardiac Centers
- Academic and Research Roles in Cardiac Surgery

