

## FELLOWSHIP IN CARDIO THORACIC SURGERY

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### 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, and allied health sciences. The institution emphasizes academic excellence, clinical expertise, innovation, and global collaboration in advancing healthcare education.

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### PROGRAM OVERVIEW

The Fellowship in Cardio Thoracic Surgery is a specialized program designed to develop expertise in surgical management of diseases involving the heart, lungs, esophagus, and thoracic cavity.

The program focuses on:

- Cardiac and thoracic surgical principles
- Coronary artery bypass grafting (CABG) and valve surgeries
- Thoracic procedures (lung and esophageal surgeries)
- Minimally invasive and robotic-assisted techniques
- Cardiopulmonary bypass and ECMO
- Preoperative and postoperative patient management

The program integrates **clinical exposure, surgical training, and hands-on procedures**, ensuring comprehensive expertise in cardiothoracic surgery.

(Deemed to be University)

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### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Perform cardiothoracic surgical procedures effectively.
  2. Apply minimally invasive and advanced surgical techniques.
  3. Manage perioperative care in complex surgical cases.
  4. Deliver patient-centered and evidence-based surgical care.
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### PROGRAM OUTCOMES (POS)

1. **Surgical Expertise:** Perform cardiac and thoracic surgeries including CABG and valve procedures.
  2. **Advanced Techniques:** Apply minimally invasive and robotic surgical methods.
  3. **Cardiopulmonary Skills:** Manage ECMO and circulatory support systems.
  4. **Clinical Decision-Making:** Handle complex and high-risk surgical cases.
  5. **Technology Utilization:** Use advanced surgical instruments and techniques.
  6. **Research Orientation:** Contribute to advancements in cardiothoracic surgery.
  7. **Patient Care:** Ensure effective communication and postoperative care.
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#### COURSE OUTCOMES (COS)

- **CO1:** Perform standard and advanced cardiothoracic surgeries.
  - **CO2:** Apply minimally invasive and robotic techniques.
  - **CO3:** Manage surgical complications effectively.
  - **CO4:** Utilize cardiopulmonary support systems.
  - **CO5:** Deliver comprehensive perioperative care.
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#### PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate expertise in cardiothoracic surgical procedures.
  2. Apply advanced surgical technologies and techniques.
  3. Integrate multidisciplinary approaches in surgical care.
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#### PROGRAM DETAILS

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

- **Academic Qualification:** MBBS with MS/DNB in General Surgery or equivalent
  - **Professional Requirement:** As per institutional norms
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#### KEY FEATURES

- Advanced training in cardiothoracic surgery
- Hands-on exposure to cardiac and thoracic procedures
- Training in minimally invasive and robotic surgery

- Exposure to ECMO and cardiopulmonary bypass
  - Focus on complex surgical case management
  - Integration of surgical skills with patient care
  - Evidence-based clinical practice
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## LEARNING OUTCOMES

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### KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of cardiothoracic surgical principles and techniques.
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### COGNITIVE SKILLS

- Clinical decision-making in complex surgical scenarios.
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### PRACTICAL & PROFESSIONAL SKILLS

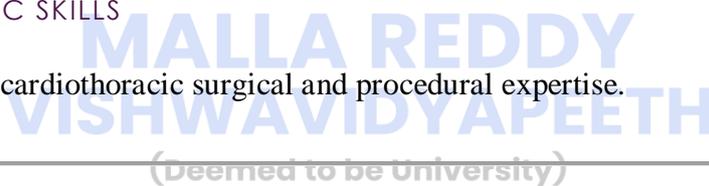
- Proficiency in cardiothoracic surgical procedures.
  - Hands-on experience in OT and clinical settings.
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### TRANSFERABLE SKILLS

- Communication and patient management skills.
  - Multidisciplinary teamwork and coordination.
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### SUBJECT-SPECIFIC SKILLS

- Advanced cardiothoracic surgical and procedural expertise.
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## CURRICULUM MODULES – THEORY

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- Introduction to Cardiothoracic Surgery
  - Cardiac Surgical Procedures (CABG, Valve Surgery)
  - Thoracic Surgical Procedures
  - Minimally Invasive and Robotic Surgery
  - Cardiopulmonary Bypass & ECMO
  - Preoperative Assessment and Planning
  - Postoperative Care and Complications
  - Surgical Technologies and Innovations
  - Critical Care in Cardiothoracic Surgery
  - Advances in Cardiothoracic Surgery
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## PRACTICAL COURSEWORK

- Clinical training in cardiothoracic surgical units
- Observation and assistance in cardiac surgeries
- Thoracic surgical procedures and case management
- ECMO and cardiopulmonary support techniques
- Preoperative and postoperative patient care
- Surgical case discussions and evaluation
- Case documentation and clinical assessment

## CAREER OUTCOMES

Graduates of the Fellowship in Cardio Thoracic Surgery can pursue careers as:

- Cardiothoracic Surgeon
- Cardiac Surgery Specialist
- Thoracic Surgery Consultant
- Surgical Specialist in Tertiary Care Hospitals
- Academic and Research Roles in Surgery

