

## FELLOWSHIP IN NEURO 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 Neuro Surgery is a specialized program designed to develop expertise in the surgical management of disorders affecting the brain, spine, and nervous system.

The program focuses on:

- Neuroanatomy and neurophysiology
- Brain and spinal surgeries
- Management of tumors, trauma, and vascular disorders
- Minimally invasive and endoscopic neurosurgical techniques
- Neurocritical care and postoperative management
- Advanced imaging and diagnostic techniques

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

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**MALLA REDDY**  
**VISHWAVIDYAPEETH**  
(Deemed to be University)

### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Diagnose and manage neurological disorders requiring surgery.
  2. Perform neurosurgical procedures with precision and safety.
  3. Apply minimally invasive and advanced surgical techniques.
  4. Deliver patient-centered and evidence-based neurosurgical care.
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### PROGRAM OUTCOMES (POS)

1. **Clinical Expertise:** Diagnose and manage brain, spine, and nerve disorders.

2. **Surgical Skills:** Perform neurosurgical procedures including tumor excision and spinal surgeries.
  3. **Advanced Techniques:** Apply minimally invasive and endoscopic neurosurgery.
  4. **Critical Care Skills:** Manage neuro ICU and post-operative patients.
  5. **Diagnostic Proficiency:** Utilize imaging techniques for surgical planning.
  6. **Multidisciplinary Approach:** Collaborate with neurologists and critical care teams.
  7. **Evidence-Based Practice:** Apply updated neurosurgical guidelines.
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#### COURSE OUTCOMES (COS)

- **CO1:** Understand neuroanatomy and neurosurgical principles.
  - **CO2:** Perform neurosurgical procedures effectively.
  - **CO3:** Apply minimally invasive and endoscopic techniques.
  - **CO4:** Manage neurocritical care and post-operative cases.
  - **CO5:** Ensure comprehensive patient care and recovery.
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#### PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate expertise in neurosurgical procedures.
  2. Apply advanced surgical and diagnostic techniques effectively.
  3. Integrate multidisciplinary approaches in neurosurgical 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 neurosurgery
- Hands-on exposure to brain and spine surgeries
- Training in minimally invasive and endoscopic techniques
- Focus on neurotrauma and tumor management

- Exposure to neuro ICU and critical care
  - Integration of surgery with advanced imaging
  - Evidence-based clinical practice
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## LEARNING OUTCOMES

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### KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of neurological disorders and surgical techniques.
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### COGNITIVE SKILLS

- Clinical decision-making in complex neurosurgical cases.
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### PRACTICAL & PROFESSIONAL SKILLS

- Proficiency in neurosurgical procedures.
  - Hands-on experience in OT and neuro ICU settings.
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### TRANSFERABLE SKILLS

- Communication and multidisciplinary coordination.
  - Clinical documentation and patient management.
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### SUBJECT-SPECIFIC SKILLS

- Advanced neurosurgical and neurocritical care techniques.
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## CURRICULUM MODULES – THEORY

- Neuroanatomy and Neurophysiology
  - Brain Tumors and Neurosurgical Oncology
  - Spine Surgery and Disorders
  - Neurotrauma and Emergency Neurosurgery
  - Minimally Invasive Neurosurgery
  - Endoscopic Neurosurgical Techniques
  - Neurocritical Care
  - Imaging in Neurosurgery
  - Complications and Risk Management
  - Advances in Neurosurgery
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## PRACTICAL COURSEWORK

- Clinical training in neurosurgery units
  - Brain and spine surgical procedures
  - Management of neurotrauma and emergencies
  - Neuro ICU care and monitoring
  - Imaging-based surgical planning
  - Case discussions and surgical evaluation
  - Case documentation and clinical assessment
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## CAREER OUTCOMES

Graduates of the Fellowship in Neuro Surgery can pursue careers as:

- Neurosurgeon
- Spine Surgery Specialist
- Neurotrauma Specialist
- Surgical Consultant in Tertiary Care Hospitals
- Academic and Research Roles in Neurosurgery

