

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

PROGRAM OVERVIEW

The Fellowship in Lasers in General Surgery is a specialized program designed to develop expertise in the application of laser technology in surgical procedures.

The program focuses on:

- Principles of laser physics and technology
- Types of surgical lasers and their applications
- Laser-assisted procedures in general surgery
- Minimally invasive and precision surgical techniques
- Safety protocols and risk management
- Postoperative care and outcomes

The program integrates **clinical exposure, procedural training, and hands-on laser applications**, ensuring comprehensive expertise in laser-assisted surgery.

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PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Apply laser technology in surgical procedures effectively.
 2. Perform minimally invasive laser-assisted surgeries.
 3. Ensure safety and precision in laser applications.
 4. Deliver patient-centered and evidence-based care.
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PROGRAM OUTCOMES (POS)

1. **Technical Expertise:** Understand and operate surgical laser systems.
2. **Procedural Skills:** Perform laser-assisted surgical procedures effectively.

3. **Minimally Invasive Techniques:** Apply laser technology for precision surgery.
4. **Patient Safety:** Ensure adherence to laser safety protocols.
5. **Clinical Decision-Making:** Select appropriate laser techniques for conditions.
6. **Multidisciplinary Approach:** Collaborate with various surgical specialties.
7. **Evidence-Based Practice:** Apply updated laser surgery guidelines.

COURSE OUTCOMES (COS)

- **CO1:** Understand principles of laser technology in surgery.
- **CO2:** Perform laser-assisted surgical procedures.
- **CO3:** Apply safety protocols and risk management.
- **CO4:** Manage surgical outcomes and complications.
- **CO5:** Ensure effective patient care and recovery.

PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate expertise in laser-assisted surgical techniques.
2. Apply advanced minimally invasive laser procedures.
3. Integrate laser technology into general surgical practice.

PROGRAM DETAILS

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

KEY FEATURES

- Specialized training in laser-assisted surgery
- Hands-on exposure to various surgical laser systems
- Training in minimally invasive laser procedures
- Focus on precision and reduced surgical trauma
- Exposure to safety protocols and advanced techniques
- Integration of laser technology in surgical practice

- Evidence-based clinical practice
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LEARNING OUTCOMES

KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of laser technology and surgical applications.
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COGNITIVE SKILLS

- Clinical decision-making in selecting laser-based treatments.
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PRACTICAL & PROFESSIONAL SKILLS

- Proficiency in laser-assisted surgical procedures.
 - Hands-on experience in clinical and procedural settings.
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TRANSFERABLE SKILLS

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

- Advanced laser surgical and minimally invasive techniques.
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CURRICULUM MODULES – THEORY

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- Principles of Laser Physics
 - Types of Surgical Lasers
 - Laser Applications in General Surgery
 - Minimally Invasive Laser Techniques
 - Safety Protocols and Risk Management
 - Laser Use in Proctology and Vascular Procedures
 - Patient Selection and Preoperative Planning
 - Postoperative Care and Complications
 - Regulatory and Ethical Aspects
 - Advances in Laser Surgery
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PRACTICAL COURSEWORK

- Clinical training in laser surgery units

- Laser-assisted surgical procedures
- Operation of laser systems and devices
- Application in proctology, vascular, and soft tissue surgeries
- Patient evaluation and treatment planning
- Case discussions and clinical evaluation
- Case documentation and procedural assessment

CAREER OUTCOMES

Graduates of the Fellowship in Lasers in General Surgery can pursue careers as:

- Laser Surgery Specialist
- Minimal Invasive Surgery Consultant
- General Surgeon with Laser Expertise
- Surgical Consultant in Hospitals and Clinics
- Academic and Research Roles in Laser Surgery

