

FELLOWSHIP IN ULTRASONOGRAPHY

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 in 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 Ultrasonography is a specialized clinical program designed to develop expertise in diagnostic imaging using ultrasound technology. The program focuses on:

- Principles of ultrasonography and imaging physics
- Abdominal, pelvic, and obstetric ultrasonography
- Doppler studies and vascular imaging
- Interpretation of ultrasound findings
- Clinical applications of ultrasonography
- Image-guided diagnostic procedures

The program integrates **theoretical learning, clinical exposure, and hands-on training**, ensuring competency in ultrasound-based diagnostics.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Perform and interpret ultrasound imaging effectively.
 2. Apply imaging techniques in clinical diagnosis and patient management.
 3. Utilize Doppler and advanced ultrasound technologies.
 4. Ensure safe and ethical imaging practices.
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PROGRAM OUTCOMES (POS)

1. **Imaging Expertise:** Perform and interpret ultrasound scans across multiple organ systems.
2. **Diagnostic Skills:** Correlate imaging findings with clinical conditions.
3. **Technical Proficiency:** Utilize Doppler and advanced imaging techniques.

4. **Clinical Application:** Support diagnosis and treatment planning through imaging.
 5. **Safety & Ethics:** Follow ethical practices and patient safety protocols.
 6. **Multidisciplinary Integration:** Collaborate with clinicians for comprehensive patient care.
 7. **Evidence-Based Practice:** Apply imaging guidelines and protocols.
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COURSE OUTCOMES (COS)

- **CO1:** Understand principles of ultrasound physics and instrumentation.
 - **CO2:** Perform abdominal, pelvic, and obstetric ultrasound examinations.
 - **CO3:** Interpret Doppler studies and vascular imaging.
 - **CO4:** Correlate imaging findings with clinical diagnosis.
 - **CO5:** Apply ultrasound in image-guided diagnostic procedures.
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PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate competency in performing and interpreting ultrasound scans.
 2. Apply diagnostic imaging in clinical decision-making.
 3. Integrate ultrasound techniques with multidisciplinary patient care.
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PROGRAM DETAILS

- **Certificate Awarded by:** Malla Reddy Vishwavidyapeeth
- **Program Duration:** One-Year Fellowship
- **Mode of Delivery:** Hybrid (Clinical Training + Theoretical Learning + Hands-on Practice)

(Deemed to be University)

ELIGIBILITY CRITERIA

- **Academic Qualification:** MBBS / MD/DNB in General Medicine / Pediatrics / General Surgery / Obstetrics & Gynecology or related fields
 - **Professional Requirement:** As per institutional and regulatory guidelines
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KEY FEATURES

- Specialized training in ultrasonography and diagnostic imaging
- Hands-on experience with ultrasound equipment and procedures
- Training in abdominal, pelvic, and obstetric imaging
- Exposure to Doppler and vascular imaging techniques

- Focus on clinical correlation and diagnostic accuracy
 - Image-guided procedure training
 - Evidence-based imaging practices
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LEARNING OUTCOMES

KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of ultrasound principles and imaging techniques.
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COGNITIVE SKILLS

- Analytical and diagnostic reasoning in imaging interpretation.
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PRACTICAL & PROFESSIONAL SKILLS

- Proficiency in performing ultrasound scans and interpreting results.
 - Hands-on experience in diagnostic imaging procedures.
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TRANSFERABLE SKILLS

- Communication and reporting of imaging findings.
 - Documentation and clinical reporting skills.
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SUBJECT-SPECIFIC SKILLS

- Integration of ultrasound imaging with clinical diagnosis and treatment planning.
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CURRICULUM MODULES – THEORY

- Principles of Ultrasound Physics and Instrumentation
 - Abdominal Ultrasonography
 - Pelvic and Obstetric Ultrasonography
 - Doppler and Vascular Imaging
 - Small Parts and Musculoskeletal Ultrasound
 - Image Interpretation and Reporting
 - Ultrasound-Guided Procedures
 - Clinical Applications of Ultrasonography
 - Safety and Ethical Considerations
 - Advances in Diagnostic Imaging
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PRACTICAL COURSEWORK

- Hands-on training in ultrasound scanning techniques
 - Performing abdominal, pelvic, and obstetric scans
 - Doppler studies and vascular imaging
 - Interpretation of imaging findings in clinical cases
 - Image-guided diagnostic procedures
 - Patient handling and positioning techniques
 - Case documentation and reporting
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CAREER OUTCOMES

Graduates of the Fellowship in Ultrasonography can pursue careers as:

- Ultrasonography Specialist
- Diagnostic Imaging Consultant
- Radiology and Imaging Practitioner
- Hospital-Based Imaging Specialist
- Clinical Practitioner with Imaging Expertise
- Academic and Research Roles in Medical Imaging

