

Essential Requirements
Magnetic Resonance (MR) Program
Washburn University

The Essential Requirements have been established through consideration by faculty and consultation through various sources such as the Occupational Outlook Handbook, Dictionary of Occupational Titles, Encyclopedia of Careers and Vocational Guidance, American Society of Radiologic Technologists and www.mrisafety.com.

The MR student technologist must have the ability to perform all requirements of the essential requirements or functions of a work day:

Achieve the mental/concentration demands of imaging.

- Concentrate for extended periods of time.
- Learn and retain new information.
- Apply theoretical concepts underlying the clinical practice of magnetic resonance imaging.

Communicate effectively in both written and verbal modes.

- Properly schedule and prescreen patients for contraindications to MR (history, lab values, etc.).
- Communicate professionally with patients and their families, staff members and providers.
- Explain MRI procedures to patients and answer their questions.
- Assess the patient's condition by asking questions and listening to responses.
- Demonstrate how to give proper instructions to optimize patient comfort and cooperation.
- Demonstrate strong interpersonal skills.
- Maintain accurate records/documentation.
- Gather, analyze and correctly interpret information.

Possess the sensitivity to physical and psychological needs of patients.

- Calm nervous patients who may suffer from claustrophobia.
- Demonstrate an understanding of a patient's cultural, ethnic or value system differences.
- Speak with patients in a professional and empathetic manner to alleviate any concerns they express.

Professionalism

- Demonstrate ethical behavior by preserving the patient's modesty.
- Adhere to national, organizational and departmental standards, protocols, policies and procedures regarding MR exams and patient care.
- Consistently maintain patient confidentiality standards.
- Perform safe, ethical and legal practices.
- Work within a clinical environment, which involves exposure to persons with physical and mental disabilities; and to pain, death, stress, communicable diseases, blood and body fluids, toxic substances and noxious odors.
- Exhibit teamwork skills and cooperation and respect for peers, faculty, supervisors and other professionals.
- Work around others, as well as alone.
- Modify behavior/performance in the clinical education setting after feedback from the technologist or supervisor.
- Show problem-solving ability sufficient to organize and complete multiple tasks

accurately and within assigned periods.

- Independently initiate routine job tasks.
- Demonstrate competency in clinical judgment and safety precautions.
- Maintain poise and flexibility in stressful or changing conditions.
- Carry out detailed, simple or complex written or oral instructions.
- Maintain personal hygiene consistent with tasks.

Physical (stamina, manual dexterity and agility factors)

- Stamina is required since MR technologists are on their feet throughout the workday (8 to 12 hours).
- Stand, walk, crouch, stoop, bend, balance, twist at neck and waist, and reach/grasp above shoulders, in front of body, to sides of body and below knees.
- Push and pull objects from 10-40 pounds unassisted, to in excess of 40 pounds routinely. Includes accessory equipment, wheelchairs, stretchers, patients and positioning aids.
- Display physical strength to move patients who may be disabled or have a limited range-of-motion.
- Manual dexterity to manipulate the MR table, position the patient properly on the MR table, operate associated equipment (specified coil, cart, wheelchair, etc.) and manage machine controls (select software options and imaging parameters).
- Perform quality assurance tests.
- Must use eyes, hands and fingers with skill in a limited time period (imaging exam set-up, etc.).
- Perform CPR.

Vision and Hearing

- Read typewritten, handwritten and computer information.
- Distinguish colors and opacity.
- Depth perception in judging distances and spatial relationships.
- Must be able to observe patients during the imaging process to ensure the patient's well-being. May be direct observation or via TV camera/monitor.
- Be able to work effectively in areas with varying light levels from bright to dimly light.
- Critique images for appropriate clinical information, image quality and patient information
- Recognize emergency situations such as adverse reactions to contrast administration, breathing difficulty, cardiac arrest, diabetic-related problems, shock, etc.
- Must be able to hear clearly a patient, staff members or providers during oral communications which may be directly or over an auditory monitoring system.
- Background or distracting noise may be present in the examination or work area.

Safety

- No metal in the technologist's body that would induce harm, i.e. pacemaker, neurostimulator, shrapnel, stent placement. The metals must be MRI safe or the technologist must wait a minimum of 6 weeks before exposure to the magnet.
- Ability to maintain a safe environment and follow magnet safety guidelines.
- Evaluate the MR equipment for proper function in order to assure patient and operator safety.
- Detect, interpret and appropriately respond to verbal and non-verbal communication, acoustically generated signals (call bells, monitors, phones, alarms).