

**Magnetic Resonance Imaging (MRI) Technologist Training Program**  
**CIP Code: 51-0920**

**Program Description:**

The Magnetic Resonance Imaging (MRI) is a diagnostic modality used for medical imaging procedures. It is a powerful tool that can offer a wealth of information about the human body. MRI is performed by using a specialized scanner called MRI machine. The MRI suit consists of computer station, patient's table that slides into a large cylinder of the MRI machine. Inside the cylinder is a magnet that, when operated, creates a powerful magnetic field. With the help of magnetic field and radio waves, images inside the human body are taken. This procedure is especially helpful to collect images of soft tissue such as organs & muscles which do not appear on x-rays. The MRI Program offers an in-depth explanation of how MRI works. This course not only serves the basic introduction to MR imaging, but also assists students with the general overview of the didactic components as well as clinical externship required for the certification.

**Program Duration:**

18 months

**Clock Hours:**

1600

**Program Objectives:**

Learn the components of the MR system hardware

Learn magnetism with reasonable comfort and ability to use the subjective material

Learn the mechanism by which MR signal is produced and detected

Learn MR tissues characteristics such as density

Learn conceptualize and explain spatial localization as well as MR image formation

Learn to apply the principle of pulse sequences for appropriate clinical application.

Learn to apply the imaging parameters & options available to the user for optimal MR imaging

Learn to identify the tissue parameters that affect tissue contrast.

Learn patient care & safety

Learn the basics on how to maintain scanner such as quality control (QC)

**Program Curriculum:**

**BIO101 Basic Medical Terminology**

**BIO 102 Human Anatomy and Physiology I**

**BIO103 Fundamentals of Pharmacology**

**BIO 104 Healthcare Laws and Ethics**

**BIO 105 Patient Care in Imaging**

**BIO 106 Human Anatomy and Physiology II**

**BIO 107 Imaging Pathology**

**PHL 104 Phlebotomy**

**MRI 111 MRI Cross Sectional Anatomy I**

**MRI 112 MRI Physics & Instrumentation I**

**MRI 113 MRI Imaging Techniques I**

**MRI 114 MRI Cross Sectional Anatomy II**

**MRI 115 MRI Physics & Instrumentation II**

**MRI 116 MRI Imaging Techniques II**

**MRI 121 Externship I**

**MRI 122 Externship II**

**Program Format:**

The College will offer this program in on-ground format as well as in hybrid format in which students can take didactic/ theory courses using online delivery method.

**Program Completion:**

A Certificate of Completion will be awarded to those students who will successfully complete all required courses as per college's Satisfactory Academic Requirements and fulfill their financial obligation towards the college.

**Certification:**

Graduates who will meet additional requirements, including but not limited to ethics requirements, of the credentialing agency will be eligible to challenge national certification exam to become certified by passing the credentialing examination.

