

MAGNETIC RESONANCE IMAGING TECHNOLOGY (MRIT)

MRIT 0000

Magnetic Resonance Imaging Advanced Certificate Advising

0 Credit Hours

This session is required for all applicants to the MRIT.CER certificate program.

MRIT 2101

Physical Principles and Instrumentation

3 Credit Hours

Comprehensive overview of MR imaging principles as well as the instrumentation associated with MR imaging. Provides a basic understanding of the principles and system components of MR image acquisition. This information enables the student to maximize MR image quality by understanding the fundamentals and system components of MR imaging. (3 lecture hours)

Prerequisite: Admission to the program is required.

MRIT 2102

Sectional Anatomy

3 Credit Hours

A study of normal anatomy and normal variations, as well as its appearance in multiple planes, enables the student to better recognize abnormal conditions and make the associated imaging changes required to adequately demonstrate the patient's anatomy and pathology. (3 lecture hours)

Prerequisite: Admission to the program is required.

MRIT 2103

Principles and Procedures I

3 Credit Hours

The content covers specific clinical applications, coils that are available and their use, considerations in the scan sequences, specific choices in the protocols and positioning criteria. Anatomical structures and the plane that best demonstrates anatomy are discussed, as well as signal characteristics of normal and abnormal structures. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the program is required.

MRIT 2104

Clinical Practice I

3 Credit Hours

Content is presented as a progression in competency levels through clinical performance objectives and competency exams. (6 lab hours)

Prerequisite: Admission to the program is required.

MRIT 2105

MR Pathology

3 Credit Hours

The magnetic resonance imaging pathology course familiarizes the student with the common pathologies found in magnetic resonance imaging and the appearance of these pathologies in various imaging protocols. (3 lecture hours)

Prerequisite: Consent of instructor is required.

MRIT 2106

Imaging Applications

3 Credit Hours

Imaging applications provide the student with a comprehensive overview of MR pulse sequences, image formation, and image contrast, as well as the knowledge of the parameters and imaging options used to create MR images. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the program and consent of instructor is required.

MRIT 2107

Principles and Procedures II

3 Credit Hours

The second principles and procedures course provides the student with the continuation of the imaging techniques related to the central nervous system (CNS), neck, thorax, musculoskeletal system and abdominopelvic regions. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the program and consent of instructor is required.

MRIT 2108

Clinical Practice II

3 Credit Hours

Content is presented as a progression in competency levels through clinical performance objectives and competency exams. (6 lab hours)

Prerequisite: MRIT 2104 or equivalent or consent of instructor.

MRIT 2109

Clinical Practice III

3 Credit Hours

Content is presented as a continuation in competency levels through clinical performance objectives and competency exams. (6 lab hours)

Prerequisite: MRIT 2108 or equivalent or consent of instructor