MAGNETIC RESONANCE IMAGING TECHNOLOGY (MRIT)

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