

Course Descriptions

MRI104 - Introduction to MRI (Online)

Clock Hours: 24

This course is delivered online and provides the student with information necessary to enter into the magnetic resonance imaging clinical setting. Topics to include: Basic principles; screening procedures; patient monitoring; dose; safety precautions; contrast agents used; contraindications; equipment operated; professional roles and behavior; processing of images; routine examinations and protocols utilized; image artifacts; and compensation. Students will receive an introduction to the physics associated with magnetic resonance imaging.

Pre-requisite: Admission to the program

XAP102 - Cross Sectional Anatomy & Pathology

Clock Hours: 40

This course is delivered in a traditional classroom style and provides the student with fundamental anatomy and pathology associated with computed tomography and magnetic resonance imaging of the head, neck, face, spine, thorax, abdomen, pelvis, and upper and lower extremities. The various structures will be demonstrated in the axial, sagittal and coronal imaging planes.

Pre-requisite: Admission to the program

MRI103 - MRI Physics

Clock Hours: 48

This course is delivered in a blended format online and provides the student with the principles of MRI scanning and the physics related to obtaining an MRI signal. Topics will include: Image weighting and contrast; spatial encoding and image formation; parameters and trade-offs; pulse sequences; flow phenomena; artifacts and their compensation; vascular and cardiac imaging; contrast agents; functional imaging techniques; instrumentation; and equipment.

Pre-requisite: ***XAP102, MRI104***

MRI200 - MRI Clinical Experience

Clock Hours: 300

Magnetic resonance imaging technologists are highly skilled professionals who use powerful magnets to obtain detailed images of the various structures in the human body. MRI technologists must have the ability to interact effectively with physicians and compassionately toward patients. The clinical portion of the MRI Program is designed to prepare students to be competent, efficient working technologists. Upon successful completion of the MRI clinical course, students will have met the examination requirements for the ARRT and be eligible to sit for the MRI certification exam.

Pre-requisite: MRI104