

# Medical Imaging Technology

## IMAGE 225

### Mammography [RE] • 4.0 Credits

Preparation for certification by the ARRT in mammography. In addition to didactic education, this course includes laboratory sessions in a mammography department. This course fulfills MQSA requirements of eight hours of digital education in mammography modality while performing mammography exams and 40 hours of Initial Training. Training in breast anatomy, physiology, positioning, compression, quality assurance/quality control techniques, and imaging of patients with breast implants. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

## IMAGE 229

### Mammography Clinical [RE] • 4.0 Credits

Preparation for certification by the ARRT in mammography. This course includes clinical and laboratory sessions while in a mammography department. Special education in mammographic examinations under the supervision of a qualified mammographer. Training in breast anatomy, physiology, positioning, compression, quality assurance/quality control techniques, and imaging of patients with breast implants. This course requires documented performance of 25 examinations that include eight hours of training in each mammography modality while performing mammography exams. Documentation includes time sheets and competencies to be verified by the student and the clinical site. Students are assigned to a mammography clinical site to complete 132 hours. These hours are required to satisfy clinical competency requirements with MQSA and eligibility with ARRT to sit for the ARRT advanced-level exam in mammography. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

## IMAGE 250

### Cross Sectional Anatomy [RE] • 3.0 Credits

Course presents normal human anatomy in various planes using CT and MRI images. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE 251

### Advanced Sectional Anatomy [RE] • 2.0 Credits

Designed for students having completed a cross-sectional anatomy course. Neuro and vascular anatomy and sectional images of joint and extremity body areas are presented with CT and MRI images. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE 265

### Body Pathophysiology [RE] • 3.0 Credits

Presents pathologies of the abdomen, chest, and neck with physiological implications pertinent to CT, MR, Interventional, and Cardiac Cath imaging modalities. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE 266

### Neuropathophysiology [RE] • 3.0 Credits

Presents neurological based pathologies and the related diagnostic/interventional procedures applied in evaluation and treatment of them. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE 270

### CT Clinical Practicum I [RE] • 3.0 Credits

Provides hands-on experience in the clinical setting. Students perform designated tasks associated with CT scanning and procedures under direct and indirect supervision. Completion of this course prepares the student for entry-level work in a CT department. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE 271

### MRI Clinical Practicum [RE] • 3.0 Credits

Provides hands-on experience in the clinical setting. Students perform designated tasks associated with MRI scanning and procedures under direct and indirect supervision. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE 280

### CT Instrumentation [RE] • 3.0 Credits

Designed to provide didactic preparation for advanced-level certification exam in CT scanning. Includes information pertaining to the equipment used, clinical application, specific technique applications, patient care, and quality control. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE 281

### MRI Instrumentation and Procedures [RE] • 3.0 Credits

Presents the physics of magnetization, image production, image weighting, pulse responses, scanning procedures, magnet safety, and the role of the technologist. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.