RADIOLOGIC TECHNOLOGY, COMPUTED TOMOGRAPHY, AND MAMMOGRAPHY (RTE)

RTE 101 | Introduction to Radiography
Lecture Credit: 2
Offers an introduction to radiology including equipment, exposure, positioning and the knowledge necessary for the radiography student to provide safe patient care including communication skills, body mechanics, patient transfer, and radiography as a profession.  
Prerequisite: Demonstrated college readiness in English and math (CCD.edu/CollegeReady)

RTE 111 | Radiographic Patient Care
Lecture Credit: 2
Offers expansion of the information presented in RTE 101, including diversity, universal precautions, legal considerations and ethics. Includes lecture and laboratory experience in the patient care areas of asepsis, vital signs, venipuncture, medical emergencies, assistance with drug administration, patient with special needs, and death and dying.  
Prerequisite: Admission to Radiology Program

RTE 121 | Radiologic Procedures I
Lecture Credit: 1 Lab Credit: 2
Introduces fundamentals of radiographic positioning including use of radiographic equipment and safety, positioning, terminology, anatomy, pathology, and skills necessary to perform radiographic procedures of the chest, abdomen, upper extremity, gastrointestinal and urinary systems.  
Prerequisite: Admission to Radiology Program

RTE 122 | Radiologic Procedures II
Lecture Credit: 1.5 Lab Credit: 1.5
Introduces additional material covered in RTE 121 including the knowledge of anatomy, pathology, and skills necessary to perform radiographic procedures of the lower extremity, pelvis, spine, and boney thorax.  
Prerequisite: Admission to Radiology Program

RTE 131 | Radiographic Pathology and Image Evaluation I
Lecture Credit: 1.5
Provides a detailed anatomic discussion of the respiratory, digestive, genitourinary systems and related medical terminology. The course will also cover the details of bony anatomy including bone structure, pathology and arthrology.  
Prerequisite: Admission to Radiology Program

RTE 132 | Radiographic Pathology and Image Evaluation II
Lecture Credit: 1.5
Provides a detailed anatomic/pathologic discussion of the spine, circulatory system, nervous system, and skull and related medical terminology.  
Prerequisite: Admission to Radiology Program

RTE 141 | Radiographic Equipment and Imaging I
Lecture Credit: 1 Lab Credit: 2
Introduces the fundamental aspects of radiographic equipment including a basic review of physics fundamentals pertaining to x-ray production, the x-ray machine, image receptors, and control of scatter radiation.  
Prerequisite: Admission to Radiology Program

RTE 142 | Radiographic Equipment and Imaging II
Lecture Credit: 1.5 Lab Credit: 1.5
Expands upon information covered in RTE 141 and provides in-depth knowledge of radiographic exposure techniques, digital image processing, and fluoroscopy. In addition, the factors that affect image quality in digital and film/screen imaging, quality control, and quality assurance will be covered.  
Prerequisite: Admission to Radiology Program

RTE 181 | Radiographic Internship I
Internship Credit: 5
Introduces the clinical education experience at the clinical education center. The student applies knowledge learned in the classroom to the actual practice of radiography.  
Prerequisite: Admission to Radiology Program

RTE 182 | Radiographic Internship II
Internship Credit: 5
Introduces additional concepts and more complex radiographic procedures than those learned in Clinical Internship I.  
Prerequisite: Admission to Radiology Program

RTE 183 | Radiographic Internship III
Internship Credit: 7
Reinforces the basic concepts of Clinical Internship I and II.  
Prerequisite: Admission to Radiology Program

RTE 211 | Computed Tomography Basics
Lecture Credit: 1.5 Lab Credit: 1.5
Introduces the clinical education experience at the clinical education center. The student applies knowledge learned in the classroom to the actual practice of radiography.  
Prerequisite: Admission to Radiology Program

RTE 221 | Advanced Medical Imaging
Lecture Credit: 1 Lab Credit: 2
Introduces advanced imaging techniques including radiography of the cranium, facial bones and special radiographic procedures. These concepts are combined with the basic oral communication techniques necessary for the professional radiographer.  
Prerequisite: Admission to Radiology Program

RTE 250 | Mammography
Lecture Credit: 2.5 Lab Credit: .5
Introduces the fundamentals of mammography as required for ARRT mammography certification.  
Prerequisite: ARRT Certified

RTE 257 | Computed Tomography Basics
Lecture Credit: 2
Introduces the principles of Computed Tomography in preparation for the internship experience. Special consideration will be given to the equipment, image production, quality control, radiation safety, patient assessment and the critical thinking skills necessary to function in an autonomous environment. This course exceeds the 16 contact hours of structured learning required by the American Registry of Radiologic Technologist (ARRT) for competencies and qualifications for the CT examination.  
Prerequisite: ARRT or NMTCB certified

RTE 260 | Magnetic Resonance Imaging
Lecture Credit: 3
Provides an in-depth study of the physics and instrumentation, clinical applications, and quality control process involved in Magnetic Resonance Imaging (MRI).  
Prerequisite: ARRT, NMTCB, and/or ARDMS certified
RTE 275 | Special Topics
Provides students with a vehicle to pursue in depth exploration of special topics of interest.
Prerequisite: This course may require prerequisites or permission of instructor
Note: Special topics courses range from 0-12 credits and vary in learning type. Please see your program chair for more information about your options.

RTE 280 | Internship
Internship Credit: 2-4
Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.
Prerequisite: RTE 257 with a grade of C better
Note: These classes are the Computed Tomography internships I-VI.

RTE 281 | Radiographic Internship IV
Internship Credit: 8
Introduces the student to the radiographic specialty areas of Pediatrics, Geriatrics, the out-patient clinic, as well as increasing proficiency in general radiography.
Prerequisite: Admission to Radiology Program

RTE 282 | Radiographic Clinical Internship V
Internship Credit: 8
Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the out-patient clinic, portable and trauma radiography as well as increasing proficiency in general radiography.
Prerequisite: Admission to Radiology Program

RTE 284 | Advanced Clinical (Specialty)
Internship Credit: 2-6
Provides the student with supervised hands-on training in advanced field of medical imaging. Allows the student to gain the clinical experience necessary to work in the specified area of advanced practice.
Prerequisite: RTE 260

RTE 289 | Radiographic Capstone
Lecture Credit: 3
Prepares the radiologic technology student to sit for the American Registry of Radiologic Technologists (ARRT) certification examination through a comprehensive review of RTE program curriculum, with practice answering certification examination-type questions through the administration of multiple mock certification exams. Provides the student with the requisite skills to effectively search for a job in medical imaging.
Prerequisite: Admission to Radiology Program

RTE 291 | Mammography Internship
Internship Credit: 2-4
Provides clinical experience for demonstrating and documenting clinical competencies required by the American Registry of Radiologic Technologist for application for registry examination.
Prerequisite: RTE 250 and ARRT Certified
Note: These classes are the mammography internships I-V.