

CURRICULUM

The Christ Hospital School of Radiography offers clinical rotations through diagnostic radiology, Computerized Tomography (CT), magnetic resonance imaging (MRI), mobile radiography, operating room, radiation oncology, interventional studies, and diagnostic medical sonography (ultrasound.)

The curriculum for the 24 month program is as follows:

Course	Course Description	Pre/Corequisites
Rad.101	<u>Radiation Protection & Biology I:</u> Provides instruction on radiation sources, detection & measurement; protection of patient and personnel; typical medical exposure levels; cell anatomy and biology are learned; film badge monitoring/pregnancy policy discussed	None
Rad. 102	<u>Clinical Education Performance Evaluation:</u> student is graded each semester by faculty and staff by criteria measuring the students' professional behavior in the health care setting.	None
Rad. 103	<u>Clinical Practicum:</u> Clinical experience under the guidance of clinical instructors; students graded on clinical competency evaluations mandated by the State of NJ and the ARRT.	101, 111, 129, 130
Rad. 104	<u>Computers and Digital Imaging:</u> Student learns applications computers use in radiologic science imaging	122, 127
Rad. 105	<u>Computer Study Review:</u> non graded course –student uses software programs related to courses	Completion of 1, 2, 3 Semesters
Rad. 106	<u>Contrast Media:</u> Study of specialized radiologic exams of body systems requiring use of contrast media for diagnostic imaging.	111, 117
Rad. 107	<u>Critical Thinking Project-Analyzing Radiographic Studies:</u> student selects radiograph they performed and presents a verbal and paper presentation in class discussing the problem solving methodologies used to achieve a radiographic of diagnostic value	Completion of course content of 1,2,3 sem.
Rad. 108	<u>Cross Sectional Anatomy:</u> Organs/systems visualized on radiographs are interpreted through CT scans	111, 121, 122
Rad. 109	<u>Developmental Testing:</u> Monthly test covering all subject material learned- assesses and scores progress	Completion of 1,2,3
Rad. 110	<u>General Review:</u> Testing on previously learned material	Completion of 1,2,3,
Rad. 111	<u>Human Structure and Function:</u> Human body systems learned relating to achieving quality images for radiographic diagnostic purposes	None
Rad. 112	<u>Imaging Modalities:</u> All imaging methods including Fluoroscopy, CT, MRI are learned	121,129
Rad. 113	<u>Introduction to Quality Assurance:</u> Acquaints student with testing methods used to insure technical consistency with radiographs.	121, 129
Rad. 114	<u>Introduction to Radiography:</u> Careers and societies associated with radiography field learned; <i>History of radiography</i> discusses scientific theories leading to discovery of x-rays; <i>Office procedures</i> covers charting and requisitioning of radiology procedures throughout the health care organization	None

Rad. 115	<u>Medical Ethics:</u> Values, conduct, attitudes relating to entire health care family taught; <u>Medical Legal</u> aspects are emphasized for liability and negligence issues; <u>Human Diversity</u> regarding equitable delivery of health care among various cultures covered	None
Rad. 116	<u>Medical Terminology:</u> Word building system taught to understand and translate language of medicine	None
Rad. 117	<u>Methods of Patient Care:</u> acquaints student with basic nursing procedures practiced in radiology departments; patient assessment of vital signs/oxygenation practiced	None
Rad. 118	<u>Pediatric Radiography:</u> Unique methods learned regarding radiographing children, focusing on reducing radiation exposure; patient care approach; pathology	101,111, 117
Rad. 119	<u>Pharmacology:</u> Science of drug interaction, effects of body absorption relating to contrast media usage	106, 117
Rad. 120	<u>Radiation Protection & Biology II:</u> Expands on knowledge/information in RP&B I, including cell/tissue/systemic responses to radiation interaction; acute, chronic, somatic,& genetic effects of radiation exposure covered	101, 111, 121, 122
Rad. 121	<u>Principles of Radiation Exposure I:</u> teaches student concepts on how to achieve diagnostic radiographic images: x-ray tube/equipment, inverse and direct square law, prime factors(MA,KvP,Time) understood through lecture and lab experiments.	None
Rad. 122	<u>Principles of Radiation Exposure II:</u> analyzing how technical factor changes affect radiographic images; built upon Exposure I	121
Rad. 123	<u>Radiation Physics I:</u> fundamental physics including atomic structure, electrostatics, magnetism, motors, transformers, generators, and circuits	None
Rad. 124	<u>Radiation Physics II:</u> physics relating to matter, electromagnetic radiation, rectification learned; concepts built upon Physics I	123
Rad. 125	<u>Radiographic Accessories:</u> emphasis placed on radiographic film/holders, screens/grids usage and how scatter and secondary radiation affect radiographs	101, 121
Rad. 126	<u>Radiographic Film Processing:</u> principles of chemistry, darkroom, film artifacts & their causes are identified; project req. on artifact/error correction	None
Rad. 127	<u>Radiographic Pathology:</u> study of disease/illnesses and how to compensate radiographically incorporating <i>Evaluation of radiographs</i> for technical factor changes	111
Rad. 128	<u>Radiographic Procedures:</u> theory taught enabling student to correctly position patients for routine diagnostic imaging by learning equipment and using their psychomotor skills to achieve diagnostic radiographs.	101, 111
Rad. 129	<u>Radiographic Procedures Lab:</u> direct application of theory learned in classroom is practiced in supervised lab with faculty instructors	128
Rad. 130	<u>Special Studies:</u> advanced course in procedures using specialized equipment for interventional radiography	106, 111, 128
Rad. 131	<u>Trauma, Mobile, Surgical Radiography:</u> positioning principles learned that are utilized when routine radiography projections can't be achieved	101, 111, 121, 128,129
Rad. 132	<u>Venipuncture:</u> theory learned about venous injections relating to contrast media and concerns with circulatory issues, eg. Infiltration of vein; 6 Rights of Patients	106, 111
Rad. 133	<u>Venipuncture Lab:</u> student learns on phantom techniques of bolus /drip methods of puncture	132