



UnityPoint Health
Des Moines

School of Radiologic Technology
1200 Pleasant Street
Des Moines, IA 50309
(515) 241-6880
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SCHOOL OF
**RADIOLOGIC
TECHNOLOGY**

2024-2025

School Catalog



UnityPoint Health
Des Moines



CURRICULUM

GENERAL EDUCATION

PREREQUISITE COURSES

Pre-requisites - courses taken at regionally accredited college/ university except where noted.

Course	Min. Credit Hours
Human Anatomy with a Lab	3
Human Physiology with a Lab	3
Psychology	3
Composition	3
Sociology	3
Computer Literacy	3
Medical Terminology	1
College Math	3
College Physics	3
*RAD099–Rad. Patient Care	2

*Arranged through UnityPoint Health - Des Moines (UPH-DM) Radiology School and admitted into class upon acceptance into the program.

MISSION STATEMENT

To educate students in the art and science of radiologic technology and to help them become competent and caring healthcare professionals.

PROGRAM GOALS

At the end of this program, each student should be able to:

- 1 Practice as a competent entry-level radiographer
- 2 Integrate critical thinking and problem solving abilities into clinical practice
- 3 Communicate effectively in the clinical arena
- 4 Demonstrate and evaluate professional development
- 5 Meet the needs of the community

Course Number	Course	Credit Hours
First Semester (July - October)		
RAD100	Introduction to Radiography and Radiation Protection	2
RAD102	Principles of Radiographic Imaging	3
RAD103	Radiographic Procedures I	5
CLN101	Clinical Practicum I	7.5
TOTAL		17.5
Second Semester (November–February)		
RAD112	Radiation Physics	2
RAD113	Radiographic Procedures II	5
RAD120	Contrast Media in Radiographic Imaging	2
CLN111	Clinical Practicum II	7.5
TOTAL		16.5
Third Semester (March–June)		
RAD104	Radiation Protection & Biology	2
RAD123	Radiographic Procedures III	5
RAD125	Radiographic Image Evaluation	3
CLN121	Clinical Practicum III	7.5
TOTAL		17.5

Course Number	Course	Credit Hours
First Semester (July - October)		
RAD220	Critical Thinking in the Radiologic Sciences	2
RAD204	Computed Tomography I	4
CLN201	Clinical Practicum IV	9
TOTAL		15
Second Semester (November–February)		
RAD214	Computed Tomography II	4
RAD203	Radiographic Pathology	2
RAD210	Advanced Patient Care	2
CLN211	Clinical Practicum V	9
TOTAL		17
Third Semester (March–June)		
RAD216	Professional Development Seminar	2
RAD230	Registry Review	6
CLN221	Clinical Practicum VI	9
TOTAL		17



ADMISSION REQUIREMENTS

Due to federal radiation safety standards, students enrolling in the program must be 18 years of age. Applicants should contact the program director if they have questions or concerns regarding this requirement. The annual application deadline is January 15.

Applicants to the Radiologic Technology program must submit the following information:

- Application for Admission form
- Non-refundable application fee of \$25
- Official high school transcript or General Education Development (GED) certificate
- All official college transcripts:
 - Transcripts must be official documents. Transcripts are considered official only when they bear the school seal or a school official's signature and are mailed from the school/college directly to the program
- Proof of having obtained an earned associate degree or higher or demonstrate a "plan of completion" for an associate degree or higher by graduation from program. If a degree is not conferred before graduation from the program this may delay the student's ability to sit for the ARRT board exam.

- UPH-DM School of Radiologic Technology has an articulation agreements with **Des Moines Area Community College** allowing students to obtain an Associate of General Studies Degree.
- UPH-DM School of Radiologic Technology also has an articulation agreement with **St. Joseph's College of Maine** allowing students to obtain either an Associate of Science or a Bachelor of Science Degree in Radiologic Science Administration.
- Students of **North Dakota State University (NDSU)** may apply to complete a two-year internship at UPH-DM School of Radiologic Technology. That internship can be used to complete a Bachelor of Science Degree in Radiologic Science through NDSU. For more information contact Poly Olson at polly.olson@ndsu.edu.
- Applicants whose native language is not English and who have not graduated from a U.S. high school must write the English as a Foreign Language (TOFEL) iBT examination and achieve an official score of at least 94 out of a possible 120.

To be considered for enrollment, applicants must have completed the following courses at an accredited college with a grade of "C" (not C-) or above in each course:

- Anatomy with Lab (minimum of 3 credit hours)
- Human Physiology with Lab (minimum of 3 credit hours)
- Psychology (minimum of 3 credit hours)
- Composition (minimum of 3 credit hours)
- Sociology (minimum of 3 credit hours)
- Computer Literacy (minimum of 3 credit hours - may be waived if applicant has already completed a minimum of an Associate's Degree)
- Medical Terminology (minimum of 1 credit hours)
- Math (algebra or finite math recommended) (minimum of 3 credit hours)
- Physics (survey of physics course is acceptable) (minimum of 3 credit hours)

Course number must be 100 level or above to meet requirement.

Statistics can not be used as the Math requirement.

Courses should be completed by December of the year prior to enrollment in the program; however, conditional acceptance may be considered if applicant is completing classes the spring prior to the beginning of the July start date. You may take these pre-requisite courses at any regionally accredited college.

Contact Mr. Van Horn at (515) 241-6880 or daniel.vanhorn@unitypoint.org for more information on required courses.

Applicants may have the option of submitting a document proving upcoming enrollment in required classes. Contact Mr. Van Horn with any questions or concerns.

Files are not reviewed until all admission information has been received. Applicants should stay in contact with program director as to the status of their application materials. They may email him at daniel.vanhorn@unitypoint.org.

Applicants are required to attend an Information Session and Job Shadow. The Information sessions are held on MOST 1st Fridays of each month. Applicants must also show proof of attending at least 4 hours of job shadowing in a medical imaging department. It is preferred that the job shadowing be completed at UnityPoint Health – Des Moines. Please contact the program director to schedule the Information Session and Job Shadow at daniel.vanhorn@unitypoint.org.

Based on information provided by the applicant, the selection committee will rank applicants utilizing a “point system.” **Meeting the enrollment requirements does not guarantee admission to the program.** A copy of the point system information is available upon request. After scoring of all applicants, the top 20 applicants will be asked to come in for an Interview. Interview Scores will be added to Applicant Score Sheet. The Top 10 Overall Scores will be offered positions in the program.

Enrollment decision for the July class is made annually by March 1, and applicants are notified by email.

Enrollment in the program is competitive, and class capacity is limited and early application is encouraged. When the July class is filled, qualified applicants will be placed on an alternate list. Open positions in the program will be filled from this alternate list. Applicants who are not admitted into the class will be placed back in the pool of eligible applicants and can request admission to the next year’s class.

The completed program application form and supporting documents can be sent to:

Daniel P. Van Horn, M.S.Ed., R.T.(R)(ARRT)
Director – Radiology Education
UnityPoint Health - Des Moines School of Radiologic Technology
1200 Pleasant Street
Des Moines, IA 50309

POST-ADMISSION PROCEDURES

Upon acceptance into the program, incoming students must:

- Submit the non-refundable \$100 acceptance fee within two weeks of receiving the acceptance letter. **This fee is applied to the first semester tuition.**
- Sign and date the program “Agreement Form.”
- Student enrollment in the program is conditional until all post-admission requirements have been successfully met.
- Provide documentation of completion and current certification in American Heart Association CPR for the Healthcare Provider.
- Complete pre-enrollment physical and demonstrate immunization requirements.
- Agree to allow UPH-DM to perform a background check
- Attend the spring New Student Orientation.
- Complete the RAD099–Online Radiology Patient Care class

Information is sent in the acceptance letter and is available upon request.



STUDENT EXPENSES

TUITION

Tuition for the program is \$1,200/semester. In addition, students pay an annual student services fee of \$400. Tuition and fee costs are subject to change.

FEE SCHEDULE

First Year	
1st Semester	\$1,600
2nd Semester	\$1,200
3rd Semester	\$1,200
Second Year	
4th Semester	\$1,600
5th Semester	\$1,200
6th Semester	\$1,200
Total Tuition + Fees	\$8,000

REFUND POLICY

Students who withdraw completely or are dismissed from the UnityPoint Health - Des Moines School of Radiologic Technology by the second Friday of the semester will receive a full refund of applicable tuition. Withdrawal or dismissal from the program after the second Friday of the semester will not receive a refund. A Withdrawal Form must be completed by the student and received by the Program Director prior to this deadline for a refund to be issued. Refunds for disbursed Title IV Funds will be determined by the Financial Aid Director. Students will be granted a refund only after refunds required by Federal and State regulations have been made and if there is a credit balance remaining.

TEXTBOOKS AND TRAJECSYS

Textbooks for the two years will cost approximately \$1,000. Cost of books may change. Students may purchase books online (i.e. Amazon, Barnes & Nobel, etc.); however, students are required to purchase the correct textbook title and edition (refer to ISBN number). Cost for Trajecsys Report System is \$150.

UNIFORMS

Students are required to wear pewter gray scrubs. Uniform cost varies depending on individual preference. The complete dress code policy is published in the Student Handbook available on the school's website, www.unitypoint.org/desmoines/radtech.

TRAVEL TO CLINICAL SITES/CLASS

Students are required to travel to selected clinical sites and classroom in the Des Moines metropolitan area. Students must have a valid driver's license and provide their own form of transportation.

CLINICAL ASSIGNMENTS

Students do not receive compensation when on clinical rotations. Clinical assignments are a required component of the educational program.

HOUSING

Students are responsible for providing their own housing.



STUDENT BENEFITS

FINANCIAL AID

The purpose of financial assistance is to provide funds to students that otherwise would be unable to pursue a college education. This assistance is intended to supplement (not replace) the amount students and/or their families can afford. Federal and state grants are available for students showing financial need. To be eligible, students must file a FAFSA form. Renewal of financial aid from year to year is based on financial need. **The school's FAFSA code is 006267.** For further Financial Aid questions please contact the Financial Aid Director Lynette Van Donselaar at lynette.vandonselaar@unitypoint.org.

The UnityPoint Health - Des Moines School of Radiologic Technology is approved by the Iowa Department of Education for education benefits administered by the US Department of Veterans Affairs. Veterans or eligible dependents planning to enroll in the program should contact the VA Regional Office in St. Louis, Missouri well in advance of their anticipated enrollment date to establish eligibility and to allow sufficient processing time by the VA. The application process for new claims takes a minimum of eight weeks to complete by the DVA. For more information, contact Daniel Van Horn at (515) 241-6880 or daniel.vanhorn@unitypoint.org.

RADIOLOGY SCHOOL SCHOLARSHIP

A scholarship may be available to students entering their second year in the program. Information for the scholarship is provided in the second semester of the program.

MEDICAL INSURANCE

Students are responsible for providing their own medical insurance and may purchase it through the medical center.

STUDENT TIME OFF

Students will be given designated winter, spring, and summer breaks. In addition, students will receive Student Time Off (STO) per semester. This STO time can be used by the student for any reason they choose (i.e. illness, personal day, birthday holiday, etc.). Additional information is provided in the Student Handbook and Clinical Syllabus available on the school's website, www.unitypoint.org/desmoines/radtech.

LIBRARY

Students are entitled to use the Oliver J. Fay Medical Library located within Iowa Methodist Medical Center. Students have 24 hour/7 day a week access to computers and online resources.

FITNESS CENTER

Memberships to the UnityPoint Health - Des Moines Health and Fitness Centers may be purchased at a discounted price. There are centers located on both the Iowa Methodist and Iowa Lutheran campuses.

HOLIDAYS

Seven holidays are observed per year: New Year's Day, Martin Luther King, Jr. Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The students are not required to attend classes or clinicals on these days.

PARKING

Free parking is provided in a lighted and protected area. The safety and security department provides "jump starts" for stalled cars in cold weather.

DES MOINES AREA REGIONAL TRANSIT AUTHORITY (DART)

Students may utilize any of the DART bus services free of charge.

CHILD CARE

An accredited childcare center is located on the Iowa Methodist Medical Center campus. Students may use this facility based on available openings. Additional information is available upon request.



GENERAL INFORMATION

START DATE

The first full week after the 4th of July. The official start date is published in the Academic Calendar available on the school's website, www.unitypoint.org/desmoines/radtech.

LENGTH OF THE PROGRAM

The UnityPoint Health - Des Moines School of Radiologic Technology is a full-time, 24-month, trimester program.

ACCREDITATION

The UnityPoint Health - Des Moines School of Radiologic Technology is accredited by the:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive Suite 2850
Chicago, IL 60606-3182
(312) 704-5300

SCHEDULE

Students are on campus usually Monday through Friday from 7:30 a.m. to 3:30 p.m. During these hours, students are in class or in clinical rotations. A sample schedule is available upon request. Students are in class and clinical sessions for no more than 40 hours/week. During the second, third, fourth, fifth, and sixth semesters, students' clinical rotations include selected evening hours. **There are weekend rotations.** Additional information is available upon request. During the first year of the program, students learn general radiography and the skills needed to produce diagnostic radiographs (X-rays). During the second year of the program, students learn advanced imaging techniques and have the opportunity to rotate through specialty areas of radiology (i.e. radiation oncology, computerized axial tomography, magnetic resonance imaging, angiography, and ultrasound).

JOB PLACEMENT

The program does not provide job placement services; however, employers in the community often send information about open positions, and this information is shared with students.

PROMOTION POLICY

At the end of each semester, faculty determines student grades. Students must maintain a 2.0 cumulative GPA (on a 4.0 scale) and have no course grade below a "C" (81%) to be promoted to the next semester. Students who have not maintained a "C" in each course will be dismissed from the program.

GRADUATION REQUIREMENTS

- Achieve a 2.0 cumulative GPA (on a 4.0 scale) with a grade of "C" (81%) or above in each course
- Attend 14 hours of Professional Development Seminar
- Participate in a Financial Aid Exit Interview, if applicable
- Meet financial obligations to the program
- Successfully complete all program and ARRT clinical competency requirements
- Complete all areas of Clinical Management with 94% accuracy

AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGIST (ARRT)

NATIONAL BOARD EXAMINATION

Upon graduation, students may write the ARRT National Board Examination to become certified in Radiologic Technology. Graduates passing the examination may use the initials "R.T. (R)" after their name. Current application fee is \$225 - fee is subject to change. Certified radiographers are required to attain continuing education credits (CEUs) to maintain their license and complete Continuing Qualification Requirements (CQR). Information on application, costs, and CEU requirements is provided during the sixth semester of the program or upon request. The ARRT may restrict eligibility for certification if a person has a felony conviction or has participated in other illegal or unethical activities. Students may contact the ARRT at (651) 687-0048 or www.arrt.org for further information.

IOWA PERMIT TO PRACTICE

In the state of Iowa, radiographers are required to have a Permit to Practice. Successfully passing the ARRT Board Examination provides eligibility for the permit. Current application fee is \$100 - fee is subject to change. Continuing education credits (CEUs) are required to maintain licensure. Information on application, costs, and CEUs is provided during the sixth semester of the program or upon request.

CONTINUING EDUCATION

After certification in radiography, graduates may further their education in advanced imaging specialties (i.e. nuclear medicine, ultrasound, radiation oncology, CT, MRI, mammography). Students are introduced to these areas during the program.

RADIATION SAFETY

In accordance with federal guidelines for maintaining radiation exposure "As Low As Reasonably Achievable - ALARA," faculty provides students with information about protecting themselves, patients, patients' families, and the healthcare team. Core principles of radiation safety are provided prior to assignments to clinical rotations. Students receive and are required to correctly wear a radiation monitoring badge at all times when on clinical rotations. The radiology department

provides the badge at no cost to the student. RAD100 & RAD104 (Radiation Biology & Protection) provides additional information on radiation safety.

PREGNANCY

A student who becomes pregnant during the program may advise the program director. If a student declares a pregnancy in writing, the program director will counsel her about revisions in her clinical schedule that may be needed to attain academic and clinical competencies. The student's time in the program may need to be lengthened to ensure all competencies are attained prior to graduation from the program. Students reserve the right to withdraw a declaration of pregnancy in writing at any time. RAD100 & RAD104 provides students with information on protecting oneself from exposure to ionizing radiation.

TRANSFER POLICY

The UnityPoint Health - Des Moines School of Radiologic Technology accepts transfer students into the program. Requirements for entrance as a transfer student are available upon request.

I-20 STUDENTS

The UnityPoint Health - Des Moines School of Radiologic Technology is not authorized to issue Certificates of Eligibility for Non-Immigrant Students (I-20).

STUDENT HANDBOOK AND CLINICAL SYLLABUS

On the first day of classes, students receive the Student Handbook and Clinical Syllabus. The handbook contains program academic and clinical policies including, but not limited to: discipline policies, pregnancy policy, radiation safety policy, and student's rights/due process procedure. Faculty review the handbook with students to address any questions or concerns. The handbook and clinical syllabus are also available on the school's website, www.universitypoint.org/desmoines/radtech. Students will receive appropriate notification prior to implementation of policy and procedure changes. The UnityPoint Health - Des Moines School of Radiologic Technology reserves the right to change fees, curriculum, and policies.



COURSE DESCRIPTIONS

RAD099 - PATIENT CARE

Radiographers need to possess the knowledge, skills, and caring attitudes required to appropriately care for patients of all ages in routine and trauma situations. Through online lectures and activities students will learn how to care for a diverse population. Patient care skills related to taking vital signs, oxygen administration, aseptic techniques, disinfecting techniques, sterilization, and isolation techniques are presented. The course also introduces students to their responsibilities in transporting, lifting and moving patients (body mechanics). Labs covering patient care skills such as vital signs and body mechanics will be provided on campus during RAD100 Introduction to Radiology. Pre-requisite: Meet admission requirements and complete this online course prior to first day of classes.

RAD100 INTRODUCTION TO RADIOLOGY AND RADIATION PROTECTION

Students are introduced to radiology and its role in healthcare delivery. Academic and administrative structures of the profession are discussed. Ethical and legal responsibilities of the profession are presented. Radiographer obligations to patients and their families, medical staff, and colleagues are discussed including their role in radiation protection. Confidentiality of patients' records and

information (HIPPA) will be emphasized. Labs covering patient care skills such as vital signs and body mechanics will be provided for students to practice their skills. Staff radiographer evaluations of students' cognitive, psychomotor, and affective behaviors in clinical are one method used to correlate classroom theory to clinical practice.

Pre-requisite: Meet admission requirements.

RAD102 PRINCIPLES OF RADIOGRAPHIC IMAGING

This course introduces students to the following theories of radiographic exposure: prime exposure factors, obtaining and storage of digital radiographic images (PACS), the processes of x-ray photon production, and the parts of the x-ray tube. Students learn about equipment routinely used in producing diagnostic images and how to use the equipment to produce diagnostic images. Student performance on clinical performance evaluations is used to correlate classroom theory to clinical practice.

Pre-requisite: Meet admission requirements

RAD103 RADIOGRAPHIC PROCEDURES I

This course provides students with precise and detailed descriptions of routine radiographic examinations. Radiographic anatomy and pathology are presented. Through intensive classroom instruction and supervised laboratory sessions, students learn how to position the human body to produce diagnostic images of the intricate internal anatomy. RAD103 concentrates on positioning skills required when performing radiographs of the chest, abdomen, upper limb and shoulder girdle. Student ability to successfully meet the criteria for clinical performance evaluations is used to correlate classroom theory to clinical practice.

Pre-requisite: Meet admission requirements.

RAD112 RADIATION PHYSICS

Today's imaging equipment requires educated operators to assure patient safety. This course is designed to provide students with an in-depth study of physics related to radiology. Beginning with a review of the English and metric measurement systems, students progress into course content on the structure of matter, electrostatics and electrodynamics, magnetism and electromagnetism, generators and motors, transformers, X-ray tubes, rectification, and X-ray circuits.

Students will review x-ray production and characteristics to reinforce previous learning. Graduates who pursue advanced imaging educational programs will have a solid foundation in radiation physics. Student successful completion of clinical performance evaluations is one method used to correlate classroom theory to clinical practice.

Pre-requisites: RAD100; RAD102

RAD113 RADIOGRAPHIC PROCEDURES II

Students began developing cognitive, psychomotor, and affective skills in RAD103. This course is designed to build on these skills as students learn to position lower limb, pelvic girdle, bony thorax, and pediatric patients. Radiographic anatomy and pathology will be presented. Classroom lecture along with intensive laboratory sessions will provide students with the skills needed to begin performing these examinations, under direct supervision, with staff radiographers and/or the clinical instructor. Students will also expand their knowledge of routine and trauma radiographic positioning and learn alternative methods for positioning patients to obtain diagnostic images. Student ability to successfully meet the criteria for clinical performance evaluations is one method used to correlate classroom theory to clinical practice.

Pre-requisite: RAD102; RAD103; CLN101

RAD120 CONTRAST MEDIA IN RADIOLOGIC IMAGING

Imaging the human body's internal organs often requires the use of contrast media to discriminate between different structures. This course will discuss different types of contrast media, indications and contraindications for their use, effect of pathologies on images, and possible adverse patient reactions. Radiographic procedures for examinations of the digestive system, genitourinary system, reproductive system, central nervous system, and vascular procedures will be presented. In addition, students learn about specialized equipment including fluoroscopy, image intensification, video recorders, cineradiography, and tomography. Through classroom and laboratory practice, the students will also review the art of venipuncture and administration of iodinated contrast media. Student successful completion of clinical performance evaluations on exams utilizing contrast media is one method used to correlate classroom theory to clinical practice.

Pre-requisites: RAD103, CLN101

RAD104 RADIATION PROTECTION AND BIOLOGY

This course will provide students with in-depth information on radiation protection methods to assure they provide maximum safety from unnecessary radiation exposure to themselves, patients, patients' families, and the healthcare team. The effects of radiation exposure to the human body will be discussed. National Council on Radiation Protection (NCRP) published regulations will be discussed. Student successful demonstration of utilizing radiation protection measures during clinical performance evaluations is one method used to correlate classroom theory to clinical practice.

Pre-requisite: RAD100

RAD123 RADIOGRAPHIC PROCEDURES III

Students will continue development of cognitive, psychomotor, and affective skills in more advanced procedures during RAD123. Throughout this course students will learn positioning of spines, cranium, and components of mobile/portable radiography will be discussed. Classroom discussion along with in depth laboratory sessions will cultivate the skills needed to begin performing these examinations, under direct supervision, with staff radiographers and/or the clinical instructor. Students will also expand their knowledge of routine and trauma radiographic positioning and learn alternative methods for positioning patients to obtain diagnostic images. Student ability to successfully meet the criteria for clinical performance evaluations is one method used to correlate classroom theory to clinical practice.

Pre-requisite: RAD113; CLN111

RAD125 RADIOGRAPHIC IMAGE EVALUATION

This course will challenge students to use their critical thinking and problem solving skills in the evaluation of radiographs for diagnostic quality. Students will view radiographs relevant to the procedures they have learned in RAD103, RAD 113, RAD 120 and are currently learning in RAD123. Patient position, correct centering of the radiographic equipment, appropriate technical factors, evidence of radiation protection, and legal issues related to correctly evaluating radiographs for diagnostic quality will be discussed. Student successful evaluation of radiographic images during clinical performance evaluations is used to correlate classroom theory to clinical practice.

Pre-requisite: RAD102, RAD103, RAD113, RAD120, CLN101, CLN111

RAD203 RADIOGRAPHIC PATHOLOGY

This course is designed to present the students with the radiographic appearance of certain disease processes as well as what must be done with technical factors to ensure proper imaging. The information presented in this course correlates with previous didactic and clinical study.

Pre-requisite: RAD103; RAD113; RAD123

RAD204 COMPUTED TOMOGRAPHY I

With the ever changing field of Medical Imaging, this online course will provide the student with the opportunity to learn a modality that is quickly becoming a major contributor in the field of diagnostic and therapeutic medial imaging. Students will learn the physics and instrumentation of Computed Tomography, clinical procedures and protocols, and cross-sectional anatomy and pathology needed to become a competent Computed Tomography Technologist.

Pre-requisites: RAD102, RAD104, RAD113 & RAD 120

RAD210 ADVANCED PATIENT CARE

This course will familiarize the student with aspects of pharmacology as it relates to the imaging sciences including routes of administration (i.e., intra-arterial, intravenous, intrathecal, etc.), Pharmacokinetics, and Pharmacodynamics. Students will also gain knowledge for recognition of life-threatening emergencies and corrective actions (i.e., shock, cardiac arrest, insulin reactions, convulsive seizures, and stroke). Electrocardiography (ECG) interpretation will be discussed as well as Advanced Cardiac Life Support Techniques.

Pre-requisites: RAD099 and RAD120

RAD214 COMPUTED TOMOGRAPHY II

Computed Tomography II will continue the knowledge needed for a radiographer to become a competent Computed Tomography (CT) Technologist. Emphasis will be placed on the physics and instrumentation of the CT process. Quality Control testing will also be discussed. At the end of the online course students will be given the opportunity to review all of the material from Computed Tomography I and Computed Tomography II by participating in Mock Board Examinations and discussion.

Pre-requisite: RAD204

RAD216 PROFESSIONAL DEVELOPMENT SEMINAR

This course is designed to provide students with the opportunity to evaluate the importance of continuing professional development. Students have the opportunity to attend a state seminar. The purpose is to provide an avenue for students to network with other Iowa/Illinois radiology students at the Annual Student/Educator Conference in Des Moines, IA where they review course materials, sit for a mock registry examination, and participate in the essay/poster competition. Faculty attends with students. Throughout the semester, guest speakers meet with students to explain their views on professionalism. Developing resumes is also presented by faculty and guest speakers. Students will research professionalism to develop their own personal professionalism philosophy.

Pre-requisites: 1st–5th Semester Courses

RAD220 CRITICAL THINKING

This course introduces students to professional radiology journals and the critical thinking process. Through an independent study format, students reference radiology journals when writing scientific research papers on an appropriate topic. Critical thinking is encouraged as students look for author bias and examine assumptions in articles. Students will write and present research papers. RAD220 is a course designed to challenge students' critical thinking processes. Through lecture, intensive lab simulations, and role playing scenarios, students will expand their ability to care for patients and produce diagnostic images.

Pre-requisite: RAD123, RAD104, CLN121

RAD230 REGISTRY REVIEW

The purpose of this course is to prepare students for the American Registry of Radiologic Technologist's (ARRT) National Board Examination. Through a variety of instructional methods, all classroom and clinical content is reviewed. Students will refresh knowledge related to the ARRT Content Specifications. Students participate in mock registry examinations to prepare them for the ARRT (American Registry of Radiologic Technologists) national board examination.

Pre-requisites: 1st–5th Semester Courses

CLN101 CLINICAL PRACTICUM I (JULY - OCTOBER)

This course is designed to introduce students to the clinical environment and provide them with the opportunity to interact with staff radiographers and radiologists to begin developing clinical skills. Students begin developing critical thinking and problem solving skills in the clinical areas as they begin to perform chest, abdomen, upper extremity and shoulder examinations learned in the classroom and practiced in the laboratory setting. Staff radiographers directly supervise students during this practicum. Clinical competency evaluations are required in Category I (chest and abdomen). Staff radiographer evaluations of students' cognitive, psychomotor, and affective behaviors in clinical are one method used to correlate classroom theory to clinical practice.

Pre-requisite: Meet admission requirements

CLN111 CLINICAL PRACTICUM II (NOVEMBER–FEBRUARY)

This course builds on CLN101 as students become more active participants in the clinical settings. Students continue to develop and demonstrate an increasing degree of competency in the clinical areas as they expand their positioning skills to include lower extremity, pelvic girdle, bony thorax, and pediatric imaging. Students will be assigned to evening rotations to expand their knowledge of radiology services and exposure to trauma examinations. Clinical competency evaluations are required in Category I (upper extremity and lower extremity) and Category II (decub abdomen and bony thorax). Staff radiographer evaluations of students' cognitive, psychomotor, and affective behaviors in clinical are one method used to correlate classroom theory to clinical practice.

Pre-requisites: RAD103; CLN101

CLN121 CLINICAL PRACTICUM III (MARCH–JUNE)

This course is designed to provide first year students with increasing independence, speed, and efficiency in their positioning skills with routine and trauma radiographic procedures. Critical thinking and problem solving abilities are reinforced. Clinical competency evaluations are required in Category I (upper extremity and lower extremity), Category II (spine, bony thorax) and Category VI (pediatric). Student completion of clinical performance evaluations is used to correlate classroom theory to clinical practice.

Pre-requisites: RAD113; CLN111

CLN201 CLINICAL PRACTICUM IV (JULY - OCTOBER)

This course is designed to provide second year students with increasing independence, speed, and efficiency in their advanced radiographic positioning skills. Critical thinking and problem solving abilities are reinforced. Clinical competency evaluations are required in Category III (contrast studies) and Category IV (portables and surgery). Evening rotations continue with the addition of weekend rotations during this course. Student completion of clinical performance evaluations is used to correlate classroom theory to clinical practice.

Pre-requisite: CLN121

CLN211 CLINICAL PRACTICUM V (NOVEMBER - FEBRUARY)

During this course students are preparing for the final term. Student's independence, critical thinking and problem solving abilities are reinforced. Clinical competency evaluations are required in Category V (headwork) and Category VI (CT, trauma). For a student to graduate in June, all clinical performance evaluations, as well as all other clinical requirements, must be satisfactorily completed. Student completion of clinical performance evaluations is used to correlate classroom theory to clinical practice.

Prerequisite: CLN201

CLN221 CLINICAL PRACTICUM VI (MARCH - JUNE)

Students in this semester are completing clinical performance evaluations and preparing for graduation. During this semester students will complete a Clinical Management rotation that will test the student's competency as an entry level radiographer. Completion of all mandatory and elective exams in Categories I, II, III, IV, V, and VI will be evaluated. For a student to graduate in June, all clinical performance evaluations, as well as all other clinical requirements, must be satisfactorily completed. Students who fail to complete the clinical requirements will have their program length extended until these are satisfactorily completed.

Prerequisite: CLN211

ONLINE/DISTANCE COURSES

ONLINE/DISTANCE EDUCATION

There are three (courses) that the students must take online once enrolled in the program:

RAD099 - Patient Care

(taken as a prerequisite after being accepted)

RAD204 - Computed Tomography I

(taken during the 1st Semester of the 2nd Year)

RAD214 - Computed Tomography II

(taken during the 2nd Semester of the 2nd Year)

All online classes are presented using **an online platform** and there is no additional fees or tuition paid to the program other than the price the student pays for the textbooks.

Students are given their own secure login user names and pass words which should not be shared with anyone else.

building your career. With a wealth of resources, the ASRT will support your journey as you grow professionally. Including the possibility of winning scholarships to help pay for your radiology education.

As a student enrolled in a radiologic science program, you will enjoy the privileges experienced by registered radiologic technologists. Simply ask your program director for a letter of enrollment verification on school letterhead, write in the date you anticipate graduating and include it with your membership application. The application is available online.

*Costs are subject to change - check ASRT website for current information www.asrt.org



IOWA SOCIETY OF RADIOLOGIC TECHNOLOGISTS (ISRT)

The purposes of this Society shall be to advance the science of radiologic technology, to assist in establishing and maintaining high standard of education and training, to elevate the quality of patient care, and to improve the welfare and socioeconomics of radiologic technologists. These purposes shall not be restricted by any consideration of nationality, race, color, sex or creed.

The functions of the ISRT are to provide meetings at which to transact Society business, to present scientific papers, to carry on educational activities, to discuss professional problems; to encourage similar programs among organizations affiliated with the Society. A scholarship is awarded to a 2nd Year Radiology Student.

An application for membership is available online - go to www.isrt.org to download the application and view membership costs.

PROFESSIONAL SOCIETIES



AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS (ASRT)

The mission of the American Society of Radiologic Technologists is to advance and elevate the medical imaging and radiation therapy profession and to enhance the quality and safety of patient care.

Enjoy Full ASRT Membership on a Student Budget - cost is \$35/year*

Enhance your professional future by joining the association that will enrich your career. The ASRT is the largest organization in the world representing radiologic science professionals like you.

ASRT membership opens the door for networking opportunities to help you make that transition from obtaining your education to