

RADIOLOGIC SCIENCE, CAREER ASSOCIATE OF SCIENCE

The Career Associate of Science degree in Radiologic Science at Albany State University is a sequence of courses designed to prepare students for positions in radiology departments and related businesses and facilities. Learning opportunities develop academic, clinical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of didactic and clinical instruction necessary for successful employment. Graduates have the qualifications of an entry level radiographer and are eligible to sit for the national certification examination for radiographers. The education provided via this program coupled with successful professional credentialing will provide graduates the prerequisite skills necessary to pursue additional training in higher level radiology service areas including but not limited to computerized tomography (CT), mammography, and other specialized modalities.

Pregnancy Policy

Please refer to the program's handbook for the RADS program's complete pregnancy policy. Any student that is pregnant or becomes pregnant while in the Radiologic Science program should consider the following:

- a. Exposure to communicable diseases. As a student, one may be exposed to a variety of communicable diseases such as rubella and the Hepatitis C virus which are a serious danger to the developing fetus. It is the pregnant student's responsibility to avoid those patients that may put them at risk.
- b. Students are at risk to radiation exposure while performing radiographic exams. Pregnant students must protect themselves and the unborn child(ren) by using radiation protection practices and avoided as much radiation as possible until after the first trimester.
- c. If the student's medical condition limits her ability to continue in the program, she may choose to withdraw and continue with the following cohort of RADS students, if a position is available, beginning with the withdrawn course(s). Excessive absences over the specified allowed amount (excused or unexcused) may cause the student to be dropped from that/those course(s).
- d. If a student discovers she is pregnant, disclosure of the pregnancy to program faculty is voluntary. If she chooses to disclose the pregnancy, a Disclosure Form will need to be completed and submitted to the program director. A Withdrawal of Disclosure Form is also available to be completed if the student needs to withdraw the disclosure.

Accreditation

The Radiologic Science program at Albany State University is currently accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). Contact information is as follows:

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

312-704-5300

312-704-5304 fax
Email: mail@jrcert.org

Graduation Requirements

In addition to college graduation requirements, students must have a grade of "C" or better in all RADS courses. The Radiologic Science program reserves the right to discontinue, at any time, the enrollment of Radiologic Science student, if, in the judgment of the Vice President of Academic Affairs and the Radiologic Science faculty, the student does not appear to have the necessary qualifications for radiologic science.

Readmission of Returning Students

Any student who fails a RADS course will not be allowed to continue onto the next semester of RADS courses. If this is the student's first failure, the student may re-apply to begin the program again the following year. If the student fails a second time, or fails more than one RADS course, it will result in permanent dismissal from the RADS program without a chance of re-admission. If a student withdraws or leaves due to reasons other than academic failure, the student may re-apply for admission in the following year in the semester needed if there is space available in that cohort. In any case, prior to readmission, the student must demonstrate continued competency in the completed courses via examination and/or demonstration with the program faculty to determine continued competency in previously completed courses. Comprehensive exam scores and clinical competency evaluation scores of 80 or higher are required to demonstrate adequate continued competency. If a period longer than one year lapses before readmission, the student must reapply to begin the program from the beginning (occupational specific courses repeated not general core). RADS courses more than two years old must be repeated. If a student is dismissed due to disciplinary reasons, that student may not reapply for admission for a period of five years from the time of dismissal.

Application Deadline

Completed application forms must be RECEIVED NO LATER THAN **NOVEMBER 1st** of each year. The application is complete **only** when the information requested is received. Students are responsible for making sure their application is complete. Applications are available electronically on the University's website and as hard copies in the Health Sciences office.

Program Admission

To apply to the Radiologic Science program, the applicant must:

- a. Meet all of Albany State University's admission requirements.
- b. Have a minimum cumulative GPA of 2.5 on a 4.0 scale.
- c. Satisfied all Learning Support requirements.
- d. Take the TEAS test. Only two attempts allowed with a minimum of six weeks between attempts.
- e. Submit a completed Radiologic Science program application.
- f. May submit optional documentation to be evaluated for points prior to deadline. Specific information describing optional documentation is provided in the following paragraphs.
- g. To progress successfully through the curriculum and function as a practicing radiologic technologist after graduation, the individual must have:
 - i. Visual acuity with or without corrective lenses to view radiographic images, physicians' orders, patients' charts,

- identifying markers on patients, equipment manuals, to identify respirations of patients, etc.;
- ii. Hearing with or without auditory aids to obtain patients' history by interview, to hear audible signals produced by imaging equipment, etc.;
- iii. Physical ability to operate equipment (portable and stationary x-ray equipment, stretchers, wheelchairs, patients, immobilization devices, etc.), to sufficiently (minimal impairment of upper and lower extremities) perform CPR, etc.
- iv. Manual dexterity to lift patient while placing imaging device, etc.
- v. Speech sufficient to communicate with staff and patients in a timely, effective manner.

Selection Process

Due to limited clinical placements, the program can only accept a certain number of applicants each year. Admission into the program is competitive based on the points system. Each program applicant is ranked by the Radiologic Science program selection committee according to accumulated points determined by criteria including, but not limited to GPA, pre-requisite course grades, TEAS scores, etc. Additional opportunities for points are provided in the next section. In order to increase one's chances of acceptance into the program, it is recommended to complete all possible opportunities for points. By obtaining as many points, one becomes more of a competitive applicant for the program. Admission into the program is non-discriminatory based race, color, religion, gender, age, disability, national origin, or any other protected class.

Additional opportunities for points are as follows:

- Up to three (3) professional recommendation forms from a non-relative can be submitted. These forms can be found in the application packet.
- Applicant's grades in the following courses: MATH 1111; ENGL 1101; BUSA 2101; BIOL 1100K OR BIOL 2411K. Be aware BIOL 1100K may not transfer. BIOL 2411K and BIOL 2412K may be taken in lieu of BIOL 1100K.
- Provided documentation of 40 hours of volunteer service in a radiology department. Documentation of volunteer service must:
 - Be on company letterhead.
 - Provide a description of duties performed.
 - Be signed by supervisory personnel of that facility.
- All of the following clinical forms/documents:
 - Health assessment form
 - Immunization record
 - PPD (tuberculosis skin test or Chest x-ray report)
 - Hepatitis B Vaccination
 - Current influenza vaccination

Application and Document Submission

ASU Health Sciences Division
Radiologic Science Program

Attention: RADS Application Coordinator
2400 Gillionville Road
Albany, GA 31707

Radiologic Science Program telephone is 229-500-2232.
Radiologic Science Program office is on the ASU Gillionville Campus, Building J, Room 224.
Health Sciences telephone is 229-500-2389.

Selection Notification

Letters of acceptance or non-acceptance will be sent out following the selection process. The selection process takes place in November (after the document submission deadline of November 1st) each year. Students are notified by December 1st each year of selection status. Selected students must confirm their intent to enroll in writing within 10 days after the post marked date of their acceptance letter. A student that fails to respond in the appropriate time frame will forfeit their position in the program.

Clinical Obligations Upon Acceptance

If accepted, students will have a clinical component of the program to complete.

Clinical placement is equally distributed among students. Although the majority of the clinical component is carried out during day time hours, less than 25% of the total clinical assignments will be during evening and/or weekend hours. Program clinical locations are mainly located outside the city limits, and all expenses associated with travel are the student's responsibility. Additionally, some program clinical affiliates require drug screens (initial and random), criminal background checks, periodic tuberculosis skin tests and specific vaccinations. If the student is placed in a facility requiring any/all of these items, the cost will be the student's responsibility. If the student did not submit the health documentation (immunization, PPD, HepB Vacc., physical assessment, etc.) prior to acceptance, these documents will need to be submitted to the RADS program director no later than February 1st following acceptance. Failure to provide this documentation will prevent the student from being allowed to attend clinical settings. These absences will be unexcused and may lead to the student's dismissal from the program.

Courses for Career Associate of Science Degree Program

Course	Title	Semester Hours
Freshman Year		
Spring		
ENGL 1101	English Composition I ²	3
BIOL 1100K or BIOL 2411K and BIOL 2412K	Human Anatomy and Physiology for the Health Care Professional ² or Human Anatomy and Physiology I and Human Anatomy and Physiology II	4
ALHE 1120	Medical Terminology ²	2
RADS 1000	Introduction to Radiography and Patient Care ²	3
RADS 1210	Clinical Imaging I ²	2
Semester Hours		14
Summer		
MATH 1111	College Algebra ²	3

BUSA 2101	Survey of Computer Applications ²	3
RADS 1020	Radiographic Procedures I ²	2
RADS 1220	Clinical Imaging II ²	2
Semester Hours		10
Fall		
RADS 1040	Radiographic Procedures II ²	3
RADS 1120	Imaging Science I ²	4
RADS 1230	Clinical Imaging III ²	4
POLS 1101	American Government ¹	3
Semester Hours		14
Sophomore Year		
Spring		
RADS 2060	Radiographic Procedures III ²	3
RADS 2130	Imaging Science II ²	4
RADS 2240	Clinical Imaging IV ²	6
Semester Hours		13
Summer		
RADS 1100	Principles of Radiation Biology and Protection ²	3
RADS 2140	Pathology for the Imaging Professional ²	2
RADS 2250	Clinical Imaging V ²	3
COMM 1000	Cultural Diversity in Communication ¹	2
Semester Hours		10
Fall		
RADS 2150	Radiologic Science Review ²	3
RADS 2260	Clinical Imaging VI ²	6
Humanities requirement may be met by taking any Area C: Humanities/Fine Arts courses listed on the Core Curriculum page (see footnote below). ^{1,3}		3
Semester Hours		12
Total Semester Hours		73

¹ These courses can be taken at any time before or during the program.
All other courses need to be taken in the prescribed semester or before.

² These courses require a C or better.

³ Humanities requirement may be met by taking any Area C: Humanities/
Fine Arts courses listed on the Core Curriculum page ([http://
catalog.asurams.edu/undergraduate/core-curriculum/#healthtext](http://catalog.asurams.edu/undergraduate/core-curriculum/#healthtext)).

RADS 1000. Introduction to Radiography and Patient Care. (3 Credits)

Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: ethics, medical and legal considerations, Right to Know Law, professionalism, basic principles of radiation protection and exposure, equipment introduction, health care delivery systems, hospital and departmental organization, medical emergencies, pharmacology/contrast agents, media, OR and mobile procedures patient preparation, death and dying, body mechanics/transportation, basic life support/CPR, and patient care in radiologic sciences. Prerequisite: Program Admission. Offered: Spring.

RADS 1020. Radiographic Procedures I. (2 Credits)

Introduces the knowledge required to perform radiologic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: introduction to radiographic imaging procedures; positioning terminology; positioning consideration; procedures, anatomy, and topographical anatomy related to body cavities, bony thorax, and abdomen. Prerequisites: ALHE 1120, ENGL 1101, BIOL 1100K, RADS 1000. Corequisite: RADS 1220. Offered: Summer.

RADS 1040. Radiographic Procedures II. (3 Credits)

Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the upper extremities and shoulder girdle; lower extremities; pelvic girdle; anatomy and routine projections of the spine, ribs and sternum. Prerequisites: RADS 1020, RADS 1220. Corequisite: RADS 1230. Offered: Fall.

RADS 1100. Principles of Radiation Biology and Protection. (3 Credits)

Provides instruction on the principles of cell radiation interaction. Radiation effects on cells and factors affecting cell response are presented. Acute and chronic effects of radiation are discussed. Topics include: radiation detection and measurement; patient protection, personnel protection, absorbed dose equivalencies, agencies and regulations, introduction to radiation biology, cell anatomy, radiation/cell interaction and effects of radiation. Prerequisites: Program Admission and RADS 1000. Corequisite: None. Offered: Summer.

RADS 1120. Imaging Science I. (4 Credits)

Content is designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. Factors that govern the image production process, film imaging with related accessories, and a basis for analyzing radiographic images. Included is the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality. Actual images will be included for analysis. Prerequisites: MATH 1111 and RADS 1000. Corequisite: None. Offered: Fall.

RADS 1210. Clinical Imaging I. (2 Credits)

Introduces students to the hospital clinical setting and provides an opportunity for students to participate in and/or observe radiographic procedures. Topics include: orientation to hospital areas and procedures, orientation to mobile/surgery, orientation to radiography and fluoroscopy, participation in and/or observation of procedures related to the thoracic and abdominal body cavities. Activities of students are under direct supervision. Prerequisite: Program Admission. Corequisite: RADS 1000. Offered: Spring.

RADS 1220. Clinical Imaging II. (2 Credits)

Continues introductory student learning experiences in the hospital setting. Topics include: patient care, radiation safety practices, equipment utilization, exposure techniques, attend to and/or observation of routine projections of the thoracic and abdominal cavities in general and fluoroscopic procedures, observation of routine projections of the upper extremities and the shoulder girdle and lower extremities, pelvic girdle, and spine, observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems and observation of procedure related to minor radiologic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision. Initial competencies will be obtained. Prerequisites: RADS 1000, RADS 1210. Corequisite: RADS 1020. Offered: Summer.

RADS 1230. Clinical Imaging III. (4 Credits)

Intermediate student learning experiences in the hospital/clinical setting. Topics include: patient care; radiation safety practices, equipment utilization, exposure techniques, attend to and/or observation of routine projections of the thoracic and abdominal cavities, upper and lower extremities, pelvic girdle, and spine, attend to and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems, and attend to and/or observation of procedure related to minor radiologic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision. Additional competencies and evidence of continued competencies will be obtained. Prerequisite: RADS 1220. Corequisite: RADS 1040. Offered: Fall.

RADS 2060. Radiographic Procedures III. (3 Credits)

Continues to develop the knowledge required to perform radiographic procedures. Topics include: gastrointestinal (GI) procedures, genitourinary (GU) procedures, biliary system procedures and special procedures, anatomy and routine projections of the cranium, facial bones, and sinuses, sectional anatomy of the head, neck, thorax and abdomen. Prerequisites: RADS 1040, RADS 1230. Corequisite: RADS 2240. Offered: Spring.

RADS 2130. Imaging Science II. (4 Credits)

Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-based and digital imaging systems, with a knowledge base in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design. This content also provides a basic knowledge of quality control, principles of digital system, quality assurance and maintenance. Content is designed to provide entry-level radiography students with principles related to computed tomography (CT) imaging and other imaging modalities (i.e., MRI, US, NM, Mammography) in terms of purpose, principles, equipment/material and procedure. Topics include: imaging equipment, digital image acquisition and display, and basic principles of CT and other imaging modalities. Topics include: imaging equipment, digital image acquisition and display, basic principles of CT and other imaging modalities. Prerequisites: BUSA 2101, RADS 1120. Offered: Fall.

RADS 2140. Pathology for the Imaging Professional. (2 Credits)

Content is designed to introduce the student to concepts related to disease and etiological considerations. Pathology and disease as they relate to various radiographic procedures are discussed with emphasis on radiographic appearance of disease and impact on exposure factor selection. Topics include: fundamentals of pathology, trauma/physical injury and systematic classification of disease. Prerequisites: RADS 1000, ALHE 1120, BIOL 1100K. Corequisite: None. Offered: Summer.

RADS 2150. Radiologic Science Review. (3 Credits)

Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: image production and evaluation, radiographic procedures, anatomy, physiology, pathology and terminology; equipment operation and quality control, radiation protection, and patient care and education. Prerequisites: RADS 1100, RADS 2060, RADS 2130, RADS 2140, RADS 2250. Corequisite: None. Offered: Fall.

RADS 2240. Clinical Imaging IV. (6 Credits)

Continues to provide students with intermediate learning experience in hospital/clinical setting. Students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: patient care, radiation safety practices, behavioral and social competencies, performance and/or observation of minor special procedures, special equipment use and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision. Competencies and evidence of continued competencies will continue to be obtained. Prerequisite: RADS 1230. Corequisite: RADS 2060. Offered: Spring.

RADS 2250. Clinical Imaging V. (3 Credits)

Advanced clinical learning experiences are obtained as students continue to develop proficiency in executing procedures introduced in Radiographic Procedures. Topics include: sterile techniques, participation in and/or observation of minor special procedures, special equipment use and genitourinary system procedures, participation in and/or observation of cranial and facial radiography and competency completion evaluation. Execution of radiographic procedures will be conducted under direct and indirect supervision. Competencies and evidence of continued competencies will continue to be obtained. Prerequisite: RADS 2240. Corequisite: None. Offered: Summer.

RADS 2260. Clinical Imaging VI. (6 Credits)

Provides students with continued hospital setting experience. Students demonstrate increased proficiency levels in skills introduced in all of the imaging procedures courses and practiced in previous clinical imaging courses. Topics include: patient care, behavioral and social competency, advanced radiographic anatomy, equipment utilization, exposure techniques, sterile techniques, integration of procedures and/or observation of angiographic, interventional, minor special procedures, integration of procedures and/or observation of special equipment use, integration of procedures and/or observation of routine and special radiographic procedures and final completion of all required clinical competencies. Execution of imaging procedures will be conducted under direct and indirect supervision. Prerequisite: RADS 2250. Corequisite: RADS 2150. Offered: Fall.