

RADIOLOGIC TECHNOLOGY PROGRAM (AAS)

Associate of Applied Science in Radiologic Technology

This limited enrollment program prepares students for potential employment in radiology imaging, which requires a degree in addition to certification as a Registered Radiologic Technologist (RT(R) by the ARRT). Admission to this program is competitive and applicants must meet program admission requirements in addition to Dalton State College admission requirements for degree students. The Dalton State College Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). For accreditation concerns, the JRCERT may be contacted at the following address:

JRCERT
20 N. Wacker Dr., Ste. 2850
Chicago, IL 60606-3182
Tel: (312)704-5300; FAX: (312) 704-5304; Email: mail@jrcert.org

Admission Procedures

1. One class (of 18-20 students) is selected to begin the professional field courses from the applicant pool. The final selection for the class is completed in April with the class beginning radiology courses in the Summer Semester. The program runs consecutively for six semesters. **Program applications are available from June 1 - November 1. The program application packet and other forms are due within 3 weeks of picking up the packet. The latest submission of any admission document is November 15th (for those who pick up the packet November 1st.).** Interested persons should contact program faculty at (706) 272-4567 or email: Holly Miller hmliller@daltonstate.edu. To obtain a program application, **starting June 1st**, contact Holly Miller at hmliller@daltonstate.edu. Once the program application has been received by Ms. Miller, she will contact the applicant for information concerning an apprenticeship meeting and scheduling.

2. The program is a full-time endeavor consisting of class and clinic Monday-Friday 7:30 a.m.-4:30 p.m. (mainly) for two years. The program does not offer part-time or distance education formats. To gain beneficial clinical experience, students may be required to attend several weekend and second shift clinical assignments in a variety of clinical education sites throughout North Georgia and Southeast Tennessee. Clinical assignments are scheduled within a 60-mile distance one-way from the college campus. The program involvement (clinical and class) does not exceed 40 hours a week and clinical assignments are distributed fairly and equitably among student co-hort groups. Each student is required to experience a 40-hour clinical week before the start of published college fall semester date each year. All program courses and Exit Exam must be passed with a grade of at least a score of 75% to progress through the program and graduation. The grading scale for courses in the radiologic technology program is as follows:

A=93-100 B=84-92 C=75-83 F=74 or below

3. Students meeting the pre-rad tech requirements are not guaranteed admission to the Radiologic Technology program. Program enrollment is limited and competitive. Those students meeting pre-rad tech requirements and completing all program admission assessments and

documents will be evaluated by the faculty of the Radiologic Technology program with the most qualified students interviewed and selected. All pre-rad tech courses are required to be completed prior to starting the program itself. Applicants are required to follow the Phases of Admission as listed in #4 below.

4. General admission procedures are

Phase I:

- Acceptance to Dalton State College (DSC) to assure acceptance for spring semester per DSC catalog.
- Submit official college transcripts to the program if student attended colleges other than DSC.
- Minimum cumulative college Grade Point Average (GPA) of 2.00/4.00.
- Completion (or near completion) of the A.A.S. Degree pre-program college courses (see #5 below).
- Contact Ms. Miller to pick-up a program application packet.
- Complete and return the program application and forms within 3 weeks of picking up the program application packet.
- For additional admission documents please see #5.
- **Extensions of application documents deadline are made on a situational basis.**
- Once program application has been received and eligibility has been determined by the faculty, the applicant will be contacted by the application coordinator to discuss and schedule clinical apprenticeship hours (see #7 below for specific details of apprenticeship). There are a limited number of apprenticeship slots available.

Applicants will not proceed to Phase II if all admission documents have not been received by the program by due dates.

Phase II:

- Complete 8 hours of clinical apprenticeship (during the application phase) as scheduled by the program faculty once academic eligibility is satisfied and all admission documents have been received by the program. **Applications received in the latter part of the due date deadlines may only be able to obtain minimum hours of apprenticeship.**
- **Applications received in the latter part of the due date deadlines may only be able to obtain minimum hours of apprenticeship.**

Phase III:

- Attend Application Orientation Day (scheduled in Spring Semester) and take program admission assessments.

Phase IV:

- Program Interview: Applicants with the highest admission points after program admission tests are graded will be contacted to schedule a program interview. Admission points are awarded for grades, prior clinical experiences, apprenticeship evaluation, admission test scores, and interview scores.

Phase V:

- All applicants will be notified of their admission status. Accepted students will begin the program Summer semester.

5. Specific pre-program (pre-rad tech) admission requirements (all courses must be passed with a grade of "C" or better).

For AAS Degree (10 Courses):

ALHT 1130	Allied Health Terminology [^]	3
BIOL 2251K	Anatomy and Physiology I ^{*/**}	4
BIOL 2252K	Anatomy and Physiology II ^{*/**}	4
COMM 1110	Fundamentals of Speech	3
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
HIST 2111	United States History to 1877 ^{***}	3
or HIST 2112	United States Hist since 1877	
MATH 1111	College Algebra [*]	3
POLS 1101	American Government ^{***}	3
PSYC 1101	Introduction to Psychology	3
Total Hours		32

[^] ALHT 1130 is a 3-hour course at DSC. Those wishing to transfer their 2-hour course can take a DSC credit by exam (if exam not passed, course must be retaken at DSC). For questions, contact Holly Miller.

^{*} It is not recommended that students enroll in more than 15 credit hours per semester unless specific SAT/ACT scores have been achieved.

Please speak with a program advisor prior to registering if you are planning to take over 15 credits in a semester. Students must maintain at least a "C" average (minimum 75%) while enrolled in the Rad Tech program. For pre-rad tech courses, a student shall earn at least a "C" in all courses or the course(s) shall be repeated. It is a privilege to take Biology 2251K without the prerequisite requirement of Biology 1107K. If a student takes Biology 2251K and withdraws or earns below a "C," the student cannot retake the course without taking Biology 1107K first.

^{**} Science and Algebra courses shall have been taken **within five years** of admission, readmission, or transfer into the program, or they shall be repeated.

^{***} Demonstration of a satisfactory knowledge of United States and Georgia constitution and history by passing POLS 1101 and HIST 2111, HIST 2112, or HIST 3930 at a University System of Georgia institution, Technical College System of Georgia institution, or selected private institutions in Georgia (see linked table (<https://www.usg.edu/curriculum/assets/curriculum/documents/TableofPrivateInstitutions.pdf>)) or by passing an examination covering the material. Students who transfer POLS 1101 and/or HIST 2111 or 2112 from a non-USG/TCSG/selected private institution must pass an institutional exam on Georgia constitution and/or Georgia history to satisfy the State legislative requirements. These students can also retake the relevant courses to satisfy the requirements at Dalton State or other USG institution. Students opting to satisfy the Georgia history and/or Georgia constitution requirements through credit by examination will have three attempts on each exam to earn at least a 60 percent. Students must successfully complete the legislative requirements **before the start of the second year of the program**. Credit by examination for these requirements can be arranged through the College's testing center. For more complete information on the Georgia legislative requirements, see https://www.usg.edu/curriculum/georgia_legislative_requirements (https://www.usg.edu/curriculum/georgia_legislative_requirements/).

- Acceptance to Dalton State College-Completed to assure acceptance for spring semester.
- Program Application/Technical skills forms (completed)-Sent to program within **3 weeks** of receiving application packet and forms
- Immunization records-Completed within 3 weeks of receiving application
- Background Check (clear)-Completed within 3 weeks of receiving application
- Reference Forms (3)-Completed within 3 weeks of receiving application
- Apprenticeship-Completed prior to scheduling faculty interview
- Interview with program admissions committee-Completed by April 10
- Selection process completed and students notified-Mid April
- Completed Physical form-After program acceptance, before Orientation

7. Apprenticeship hours require the following:

- **After the submission of the program application, the applicant will be contacted by the program clinical coordinator to discuss the scheduling of apprenticeship hours: 8 hours in Dalton clinical sites.**
- **The Scheduling of apprenticeship sessions is limited and applicants are urged to complete application documents as soon as possible to start the apprenticeship orientation process.**
- **Applicants must be accepted to Dalton State College, have a minimum college cumulative grade point average of 2.00/4.00, and all program application documents received by the program for apprenticeship eligibility.**
- **Recommended dress: apprentice (optional): smock, khaki pants, white collared polo shirt, white tennis shoes, and socks.**
- **Neat dress (no jeans, no colored tennis shoes, no shorts, no sandals).**
- **Minimal: jewelry, make-up, and cologne; no visible body tattoos; no body piercings except for one earring per ear lobe for females (no visible body piercings includes tongue, eyebrow, nose, chin, facial, and/or ear cartilage). All visible tattoos must be covered with flesh-tone bandages or sleeves. Artificial fingernails are not permitted.**
- **Personal Hygiene: well-groomed with no offensive odors; no visible tooth decay; no smoke on clothing.**
- **Hairstyle: neatly maintained and conservative color with little to no contrast in colors. Females: pulled back if long, hair out of eyes. Males: hair short to no longer than top of shirt collar in back, neatly trimmed facial hair, hair out of eyes.**
- **Enthusiasm to learn; highly productive sessions (quality and quantity of exams observed).**
- **Mobile phones/pagers/cameras/computers are NOT permitted on apprenticeships.**
- **Professional and ethical language and behavior displayed at all times.**
- **Observe and/or assist with all procedures performed during the apprenticeship sessions.**
- **Additional information will be given to apprentices during the Apprenticeship Orientation session.**

Program Fees

The following fees are estimates for various program items:

6. Admission Procedures and Deadlines/Due Dates

Fee	Amount
Drug Screen/Background Check	\$90 Completed within 3 weeks of receiving application
TB, influenza vaccine	\$50 Completed within 3 weeks of receiving application
Medical exam w/vision screening	\$100 Completed after acceptance & submitted 1 week prior to program start
Books	\$900 Purchased prior to Program Orientation
Uniforms, Shoes, Lab Coat, Patch	\$175 Purchased prior to Program Orientation
Liability Insurance (professional)	\$15/year Purchased prior to beginning of each year
Health Occupation Fee	\$25/semester, each semester
ARRT Certification Exam	\$250 Early-sixth semester

Additional costs: Semester Tuition and Fees; Lost Lead Marker Set (\$35.00, estimated); Lost Film Badge (\$35.00 + shipping cost, estimated); Graduation Items

Policies outlining the tuition fee structure are found (<https://www.daltonstate.edu/admissions/oncampus-calculator.cms>), costs of books and list (found in rad tech student Handbook), withdrawal and refund schedule are found (<https://www.daltonstate.edu/admissions/oncampus-calculator.cms>)

Radiologic Technology Program Curriculum Model

First Year

Summer	HourFall	HourSpring	Hours
RADT 1105	3 RADT 1107	2 RADT 1127	3
RADT 1111	3 RADT 1125	3 RADT 1143	3
RADT 1121	3 RADT 1152 (Clinical Hours: 340 (15/wk@20/wk + 40 August week) Total: 340)	4 RADT 1153 (Clinical Hours: 300 (15/wk @ 20/wk) Total: 300)	4
RADT 1151 (Clinical Hours: 160 (10/wk@16/wk) + 40 (mentoring) Total: 200)	3 RADT 1232	2	
	12	11	10

Second Year

Summer	HourFall	HourSpring	Hours
RADT 2229	2 RADT 2104	2 RADT 2106	4
RADT 2234	2 RADT 2145	3 RADT 2246	3
RADT 2244	2 RADT 2255	5 RADT 2256	5
RADT 2254	5 Clinical Hours: 400 (15wk @ 24/wk + 40 Aug wk) Total: 400	Clinical Hours: 360 (15wk @ 2/wk) Total: 360	
Clinical Hours: 240 (10wk @ 24/wk) Total: 240			
	11	10	12

Total Hours: 66

First Year Total Clinical Hours Estimation *	840
Second Year Total Clinical Hours Estimation *	1000
Total Hours	1840

* Clinical Hours may extend into final exam week.

General Education

(Grades of C or higher req'd. See other notes in #4 above.)		
ALHT 1130	Allied Health Terminology	3
BIOL 2251K	Anatomy and Physiology I	4
BIOL 2252K	Anatomy and Physiology II	4
COMM 1110	Fundamentals of Speech	3
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
HIST 2111	United States History to 1877	3
or HIST 2112	United States Hist since 1877	
MATH 1111	College Algebra	3
POLS 1101	American Government	3
PSYC 1101	Introduction to Psychology	3

Major Field Requirements ***

RADT 1105	Radiologic Tech&Patient Care I	3
RADT 1107	Patient Care II	2
RADT 1111	Radiographic Anatomy I	3
RADT 1121	Radiologic Procedures I	3
RADT 1125	Radiographic Proc II & Anatomy	3
RADT 1127	Radiographic Proc&Anatomy III	3
RADT 1143	Intro to Radiologic Science I	3
RADT 1151	Intro Clinical Rad Tech I	3
RADT 1152	Intro Clin Rad Tech II	4
RADT 1153	Interm Clin Rad Tech I	4
RADT 1232	Introduction to Exposure I	2
RADT 2104	Radiologic Seminar	2
RADT 2106	Radiologic Review	4
RADT 2145	Adv Radiologic Science II	3
RADT 2229	Radiographic Procedures IV	2
RADT 2234	Adv Radiologic Exposure II	2
RADT 2244	Radiation Protection	2
RADT 2246	Radiation Biology	3
RADT 2254	Interm Clin Rad Tech II	5
RADT 2255	Adv Clin Rad Tech I	5
RADT 2256	Advanced Clinical Rad Tech II	5

Total Hours 98

***Successful completion of Dalton State College Radiologic Technology program major field courses. Acceptable transfer credits from other equivalent JRCERT-approved Radiography programs will be considered on an individual basis.

Note: Graduation from Dalton State College Radiologic Technology program curriculum satisfies the Standard First Aid component. A valid and current Adult CPR card is required for program applicants and entire program enrollment. It is recommended that students wait to take the CPR course when the student begins the RADT courses.

Courses

RADT 1102. Radiology Terminology. 2-0-2 Units.

Introduces the elements of medical terminology as it relates to the field of radiologic technology. Emphasis is placed on building familiarity with medical words through knowledge of roots, prefixes, and suffixes. (Career Course)

Prerequisites: RADT 1101.

RADT 1105. Radiologic Tech&Patient Care I. 2-2-3 Units.

Introduction to Radiologic Technology and technologist's skills; patient care and assessment, clinical observation and documentation, phlebotomy/venipuncture, vital signs, medical emergencies, basic life support/CPR, infection control, OSHA Standards, blood/air-borne pathogens, methods of sterilization, medical law and ethics, equipment and imaging principles introduction, basic radiation protection principles, and issues common to many specializations in the health care profession. (Career Course)

RADT 1107. Patient Care II. 2-0-2 Units.

Continues the development of the knowledge and skills for delivering patient care in the clinical setting, including consideration for the physical and psychological needs of the patient and family, routine and medical emergency patient care, infection control procedures using universal precautions, education of patient as it pertains to the radiologic procedure, awareness of ethical law in radiology, concepts of pharmacology, venipuncture, and administration of contrast media and intravenous medications. Laboratory evaluations will be administered. (Career Course)

RADT 1111. Radiographic Anatomy I. 2-1-3 Units.

Introduces students to the anatomy and physiology of the human body with an emphasis on radiologic correlation to pertinent radiologic procedures. Topics include: respiratory system, upper and lower extremities, abdomen, bony thorax, pelvis and hip, ossification, joints, human chemistry and cells, and integumentary system. (Career Course)

Prerequisites: Program Admission, Radiologic Technology.

RADT 1112. Radiographic Anatomy II. 2-1-2 Units.

Continues the study of the human anatomy and physiology with an emphasis on radiologic correlation to pertinent radiologic procedures. Topics include: vertebral column, skull, sinuses, and systems including: digestive, urinary, and biliary. (Career Course)

Prerequisites: RADT 1111.

RADT 1113. Adv Radiologic Anatomy III. 2-0-2 Units.

The third course in the radiologic anatomy sequence. Provides the student with knowledge of the following topical areas and body systems: circulatory, lymphatic, reproductive, endocrine, muscular, special senses, nervous system and cross-sectional anatomy. The student will also be able to correlate basic cross-sectional anatomy to a variety of imaging modalities. (Career Course)

Prerequisites: RADT 1112.

RADT 1121. Radiologic Procedures I. 3-1-3 Units.

Introduces the student to radiologic procedures, positioning, image analysis, and correlation of anatomical structures to radiographic films. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Laboratory evaluations will be administered. Topics include: introduction to radiologic procedures, positioning terminology, positioning considerations, and procedures, anatomy, and topographical anatomy related to body cavities (chest, abdomen). (Career Course)

RADT 1125. Radiographic Proc II & Anatomy. 2-1-3 Units.

Continues development of the knowledge and skill required prior to execution of radiologic procedures in the clinical setting. Laboratory evaluations will be administered. Topics include: anatomy and routine radiologic procedures methodologies performed for the upper and lower extremities, pelvis, spines, bony thorax, skull. (Career Course)

RADT 1127. Radiographic Proc&Anatomy III. 3-2-3 Units.

Continues the study of anatomy and radiologic procedures to include: skull, sinuses, mastoids, zygomatic arches, facial bones, upper and lower gastrointestinal, urinary, biliary systems, and cross-sectional anatomy. Laboratory evaluations will be administered. (Career Course)

RADT 1143. Intro to Radiologic Science I. 3-0-3 Units.

Introduces the concept of basic physics and emphasizes the fundamentals of x-ray generating equipment. Topics include: units of measure, physical principles, atomic structure, structure of matter, electrostatics, magnetism, electromagnetism, control of high voltage, rectification, basic principles of x-ray tube operation and x-ray circuitry. (Career Course)

Prerequisites: RADT 1232.

RADT 1151. Intro Clinical Rad Tech I. 0-16-3 Units.

Introduces students to the performance of radiographic procedures in a variety of clinical settings (i.e., hospitals, doctor's offices) and provides an opportunity for students to participate in or observe radiographic procedures. Emphasis is placed on clinical exposure to competencies taught and evaluated in Radiologic Procedures I. Students' activities are under direct supervision before competency evaluation and under indirect supervision after competency evaluation. (Career Course)

RADT 1152. Intro Clin Rad Tech II. 0-20-4 Units.

Continues introductory student learning experiences in a variety of clinical settings. Emphasis is placed on those procedures presented in Radiologic Procedures I and II. Student's activities are under direct supervision before competency evaluation and under indirect supervision after competency evaluation. (Career Course)

Prerequisites: RADT 1151.

RADT 1153. Intern Clin Rad Tech I. 0-20-4 Units.

Provides students with continued clinical setting work experience. Students improve skills in executing procedures introduced in Radiologic Procedures I and II and practiced in previous clinical practicums. Students activities are under direct supervision before competency evaluation and under indirect supervision after competency evaluation. (Career Course)

Prerequisites: RADT 1152.

RADT 1232. Introduction to Exposure I. 2-1-2 Units.

Introduces knowledge of the factors that govern and influence the production of the radiographic image on radiographic film. Emphasis will be placed on knowledge and techniques required to process radiographic film. Topics include: introduction to atomic structure and x-ray production, film processing and chemicals, artifacts, automatic processor troubleshooting, processing quality assurance, state and federal regulations, silver recovery systems, radiographic quality principles to include: recorded detail, distortion, density, and contrast, film holders and intensifying screens, grids and solving technique problems with a variety of mathematical formulas. (Career Course)

RADT 2104. Radiologic Seminar. 2-2-2 Units.

Provides students the opportunity to enhance critical thinking and problem-solving skills. Each student will exhibit creativity in the production of course assignments and evaluations. In addition to creativity assignments, students will be introduced to job-finding skills, resume production, and job-interviewing techniques. Additional topics included in the course are: radiographic pathology, and radiographic quality assurance. Students will also have the opportunity to be evaluated on a variety of mock registry examinations. (Career Course)

RADT 2105. Radiologic Seminar. 2-2-3 Units.

Provides students the opportunity to enhance critical thinking and problem solving skills. Each student will exhibit creativity in the production of course assignments and evaluations. In addition to creativity assignments, students will be introduced to job-finding skills, resume production, job-interviewing techniques. Additional topics included in the course are: radiographic pathology, and radiographic quality assurance. Students will also have the opportunity to be evaluated on a variety of mock registry examinations. (Career Course)
Prerequisites: RADT 2234.

RADT 2106. Radiologic Review. 3-3-4 Units.

Provides a review of basic knowledge from previous courses and helps the student prepare for the national certification for radiographers. Topics include: principles of image production and evaluation, radiation protection and biology, radiologic equipment, radiographic anatomy, physiology and pathology, radiographic procedures, and patient care techniques. (Career Course)
Prerequisites: RADT 2145.

RADT 2145. Adv Radiologic Science II. 3-0-3 Units.

Continues discussion of the concepts of basic physics and the fundamentals of x-ray generating equipment. A basic review of Radiologic Science I will be presented. Additional course topics include: production and characteristics of radiation, inter-actions of x-ray and matter, survey of a variety of radiographic equipment, image intensified fluoroscopy, recording media and techniques, image noise, and equipment monitoring and maintenance. (Career Course)
Prerequisites: RADT 1143.

RADT 2229. Radiographic Procedures IV. 2-1-2 Units.

The final course in the radiologic procedures sequence. Topics include radiologic anatomy and procedures for the following: reproduction system, venograms, arteriograms, panorex, myelograms, arthrograms, bronchograms, tomograms, and pediatric and trauma radiology. The course also includes an introduction to adjunct imaging modalities including: computerized tomography, magnetic resonance imaging, radiation therapy technology, ultrasound, nuclear medicine, cardiac catheterization, digital radiology, mammography, and angioplasty. Also includes a review and evaluation of the basic radiologic procedures presented in the previous three radiologic procedures courses. Laboratory evaluations will be administered. (Career Course)

RADT 2234. Adv Radiologic Exposure II. 2-1-2 Units.

Continues to develop knowledge of the factors that govern and influence the production of the radiographic image on radiographic film. Topics include: beam limiting devices, beam filtration, technique alterations for a variety of equipment and patient pathology, control of scattered radiation, advanced technique formation and exposure calculation. (Career Course)
Prerequisites: RADT 1232.

RADT 2244. Radiation Protection. 2-1-2 Units.

Provides instruction on the principles of safe radiation usage, protection, and interaction of radiation on living matter. Topics include: radiation detection, measurement, patient and radiographer protection, dose limits, state and federal regulations and agencies. (Career Course)
Prerequisites: RADT 1143.

RADT 2246. Radiation Biology. 2-1-3 Units.

Provides a review of the topics discussed in Radiation Protection as well as instruction on the interaction of radiation on living matter. Topics include: radiation detection, measurement, patient and radiographer protection, dose limits, radiation biology, cell anatomy, radiation/cell interaction, and effects of radiation. (Career Course)
Prerequisites: RADT 2145.

RADT 2254. Intern Clin Rad Tech II. 0-24-5 Units.

Provides students with continued clinical setting work experience. Students improve skills in executing procedures introduced in Radiologic Procedures I, II, and III; and practiced in previous clinical practicums. Students activities are under direct supervision before competency evaluation and under indirect supervision after competency evaluation. (Career Course)
Prerequisites: RADT 1153.

RADT 2255. Adv Clin Rad Tech I. 2-24-5 Units.

Provides students with continued clinical setting work experience. Students improve skills in executing procedures introduced in Radiologic Procedures I, II, III, and IV; and practiced in previous clinical practicums. Students activities are under direct supervision before competency evaluation and under indirect supervision after competency evaluation. (Career Course)
Prerequisites: RADT 2254.

RADT 2256. Advanced Clinical Rad Tech II. 2-24-5 Units.

Provides a culminating clinical setting work experience which allows the students to synthesize information and procedural instruction provided throughout the Radiologic Technology program. Emphasis is placed on skill level improvements and final completion of all required clinical competencies presented in previous courses and practiced in previous clinical Radiologic Technology courses. Execution of radiographic procedures will be conducted under indirect supervision.