Diagnostic Imaging

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Associate in Applied Science Degree (5 semesters)
Career Cluster: Health Science

At a Glance
Radiologic technologists are healthcare professionals who perform diagnostic imaging examinations. Images are created using x-rays that pass through the body. They are educated in anatomy, patient positioning, examination techniques, equipment protocols, radiation safety and protection, and basic patient care. Radiologic technologists perform a variety of diagnostic x-ray examinations of the skeletal system chest and abdomen. They may also administer contrast media to visualize anatomy in the body such as the gastrointestinal (GI) tract. Radiologic technologists work closely with radiologists, the physicians who interpret medical images to either diagnose or rule out disease or injury. Radiologic technologists may have the opportunity to specialize in specific imaging modalities, such as bone densitometry, computed tomography (CT), mammography, magnetic resonance imaging (MRI), nuclear medicine, or sonography.

With the advancement of technology and as the number of aging Americans increases, the demand for diagnostic imaging has grown. Employment opportunities for qualified professionals to provide medical imaging are available nationwide in a variety of settings such as hospitals, diagnostic imaging centers, urgent care centers, and specialty clinics (for example, orthopedics).

Program Description
The program is a five-semester course of study designed to provide academic and clinical training in the diagnostic imaging profession. Students will begin to participate in clinical rotations beginning the first semester of the program and will be assigned hours consistent with day shift for the majority of their training. Beginning the third semester, students will be required to complete an evening shift rotation from 1:00 – 9:30 p.m. students are required to travel to different locations during the clinical education phase. Graduation requirements must be met within three (3) years following entry into the program.

The Diagnostic Imaging program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) located at 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606 (www.jrcert.org). Upon graduating from a program accredited by JRCERT, students are eligible to apply to take the national registry examination of the American Registry of Radiologic Technologists (ARRT). By successfully passing the national registry exam, you will be awarded the credential, RT(R), registered technologist (radiography).

Admission Requirements
Applicants Must:
1. Meet all the general admission requirements of WSCC.
2. Submit the following to the Director of Admissions:
   a. Submit a WSCC application with official transcripts from all schools and COMPASS/ACCUPLACER scores for reading, writing, and math. Applications will be accepted until June 1. Applications received after June 1 will be considered on a space available basis.
   b. Attain a minimum GPA of 2.5 or greater on a 4.0 scale with a grade of “C” or better on all general required pre-DI courses. GPA calculated for program selection will be on the general required pre-DI courses excluding ORI 110.
3. Submit a complete application packet for admission to the Diagnostic Imaging program director by June 1. Applications will be available through the program website only. The packet should include the following documents:
   a. Application for the Program and unofficial transcripts
   b. Essential Function Standards
   c. Proof of Age (Copy of Birth Certificate)
   d. ACT with minimum composite score of 18
   e. Diagnostic Imaging ranking form
4. Applicants must be at least 18 years of age. (Alabama Regulations for Control of Radiation Rule 420-3-03(6), “Occupational Radiation Dose Limits,” states that all occupational workers employing ionizing radiation, must be at least 18 years of age).
5. Applicants must be in good standing with the college.
6. Applicants must meet the Essential Function Standards required for Diagnostic Imaging Program.
7. Applicants must be eligible for placement into the following courses:
   a) ENG 101
   b) MTH 100
   c) BIO 201

NOTE: Students without prior college courses will submit High School transcript with a minimum cumulative High School GPA of 2.5 and complete instructions on DI Ranking form.

Student must be eligible for Math 100 (higher level accepted), English 101, and Biology 201 (A & P I) as determined by Compass or ACT score during the first semester of Diagnostic Imaging courses.

NOTE: It is the responsibility of each applicant to insure that all classes from other institutions have been transferred and to insure that their application is complete. Admission to the Diagnostic Imaging Program is competitive, and the number of students is limited by the number of faculty and clinical facilities.
available. Meeting the minimum requirements does not guarantee acceptance.

**General Qualifications For ARRT Certification**

Students must satisfy general qualifications for certification in accordance with The American Registry of Radiologic Technologists (ARRT) guidelines. The ARRT is the board that administers the national certification examination upon completion of an accredited Radiologic Technology Program. A candidate for certification by the ARRT must meet the ethics education and examination requirements as described in The American Registry of Radiologic Technologists Rules and Regulations and ARRT Standards of Ethics.

In order to take this examination you must be of good moral character. Generally, the conviction of a felony or any other offense or misdemeanor, or a felony involving moral depravity indicates a lack of good moral character for ARRT purposes. Please contact the American Registry of Radiologic Technologist (651) 687-0048 for advisement if the previous statement applies.

Eligible candidates are allowed three attempts within three years to pass the ARRT exam. After three unsuccessful attempts or expiration of the three-year limit, the individual must reapply and, if accepted, complete the entire program.

**Selection and Notification**

The Diagnostic Imaging program admits students in the fall semester of each year. Students are selected on the basis of ACT scores and GPA of general education courses. All other factors being equal, cumulative GPA will be the deciding factor for admission. All applications will be reviewed for completion of Diagnostic Imaging program admission requirements. Written notification of the outcome of each application will be mailed to the student.

**Program Expectations**

Students admitted into the Diagnostic Imaging program are expected to comply with the Health Science Program Regulations and Expectations as published in the Programs of Study section of the Wallace State College Catalog.

**Required Competencies:**

Candidates for certification are required to meet the Professional Requirements specified in the ARRT Rules and Regulations. The following identifies the minimum didactic and clinical competency requirements for certification referenced in the Rules and Regulations. Upon completion of the Diagnostic Imaging program candidates will have obtained education and experience as required by the Joint Review Committee on Education in Radiologic Technology (JRCERT) (www.jrcert.org) as well as the American Registry of Radiologic Technologist (ARRT).

**Didactic Requirements:**

1. Candidates must successfully complete coursework addressing the topics listed in the General Required Courses and Major Required Courses.

**Clinical Requirements:**

1. Candidates must demonstrate competence in the following clinical activities (www.arrt.org):
   a. Six mandatory general patient care activities
   b. Thirty-one mandatory radiologic procedures
   c. Fifteen elective radiologic procedures to be selected from a list of 35 procedures
   d. One elective imaging procedure from the head section
   e. Two elective imaging procedures from the fluoroscopy studies section, one of which must be either an Upper GI or Barium Enema.

**Upon Admission**

1. Students accepted into the program must attend the mandatory orientation session. Failure to do so will result in forfeiture of their place in the class.
2. Upon acceptance into the Diagnostic Imaging Program, the student must submit:
   a. A recent certification of good health from a physician, verifying that the student is in good physical and mental health and is able to perform the duties and activities required of Radiologic Technologists.
   b. Mantoux TB skin test results and complete immunization documentation must be included on the form.
   c. Evidence of having received the second of three Hepatitis B vaccinations or completion of the series.
   d. Provide proof of health insurance coverage.
3. Students will be required to complete CPR certification within class activities.

Admission to the Diagnostic Imaging program shall be provisional depending upon the student’s ability to pass an initial drug screen and background check. Students may be subjected to random drug testing during the length of the program. Students are required to carry liability, accident, and medical insurance for the duration of program enrollment. Students cannot begin clinical rotations until copies of the health certificate, Hepatitis immunization status, CPR certification and health insurance card are on file. Liability and accident insurance are available through the college. Students should provide copies of the above documents at the mandatory orientation.

**Progression**

Uninterrupted progression through the Diagnostic Imaging program is required. Any student whose progression is interrupted must reapply for readmission. If progression is interrupted for any reason, the student may only be readmitted one time. Any changes in the curriculum or admission procedures will be applicable upon the student’s readmission. Students selected to the Diagnostic Imaging program must meet the following criteria:

1. Progress through all Diagnostic Imaging courses in the sequence specified by the program faculty.
2. Maintain a minimum grade of 75% or higher in major required courses. Failure to do so will result in dis-missal from the program.
3. Maintain a 2.5 cumulative GPA in all coursework.
4. Maintain the ability to meet the Essential Functions.
5. Successfully complete the program within 33 months from the initial semester of RAD courses.
6. Maintain Current CPR at the health care provider level.
7. Abide by the policies, procedures, and rules of behavior of the college and the Diagnostic Imaging program.
8. Abide by the policies, procedures, and rules of behavior of the clinical agencies.
9. Submit completed medical forms by required deadlines.
10. Students are required to pass the Diagnostic Imaging Exit Exam in RAD 227. Failure to pass the exit exam will result in a failing grade for RAD 227, regardless of other grades or competencies achieved.

Re-Admission Policy

Students who interrupt the progression in the Diagnostic Imaging program must apply for readmission. A student who fails to progress during the first semester of the program must reapply for acceptance as a new student. Students must submit a readmission request and application packet no later than mid-term of the term prior to a planned reentry. Readmission to the Diagnostic Imaging program is not guaranteed even if a student meets all requirements for readmission. Readmission also depends upon availability of clinical space with students in regular progression given first option. The student must be considered for readmission only once.

Readmission requires the following:
1. Submission of completed application packet.
2. A 2.5 cumulative GPA in all coursework.
3. That no longer than 33 months may elapse from initial admission term to date of graduation.
4. All students who are readmitted must prove competency in all previous coursework as prescribed by the program and successfully complete all RAD courses in which a “D” or “F” were received. If a student cannot prove competency, the request for admission will be denied and the student must repeat all courses of the program regardless of previous grades obtained.
5. Submit completed medical forms by required deadlines
6. Ability to meet and comply with standards and policies in the current college catalog and Student Handbook.
7. Students who have been dismissed from two clinical facilities are ineligible for readmission.
8. Any student dismissed for academic or disciplinary reasons from the College will not be considered for readmission.
9. All students must meet all admission requirements to be eligible for readmission.
10. Any changes in the Diagnostic Imaging program and student handbook will be applicable to any student upon readmission.

Transfer Policy

Receiving advance placement in the Radiologic Technology program requires the following:
1. Unconditional admission to the college with clear academic status.
2. Ability to meet and comply with standards and policies in the current College Catalog and Student Handbook.
3. Minimum cumulative GPA of 2.5.
4. No longer than 33 months elapsing from the initial admission term to date of graduation.
5. Official transcripts verifying a minimum grade of “C” earned in courses which represent collegiate course work relevant to the degree with course content and level of instruction resulting in student competencies at least equivalent for those matriculating students. Alabama Community College System Standardized Radiologic Technology Curriculum courses will be transferred without review of the course syllabus. Verification of knowledge and/or skills may be required.
6. Eligibility to return to previous Radiologic Technology program in good standing.
7. No more than one semester in which a grade of “D” or “F” has been earned in a radiography course.
8. Completion of 25 percent of total required hours for the A.A.S. Degree in Radiologic Technology at institution conferring degree.

Career Path

Upon completion of the program, candidates should take the registry and become a Registered Radiologic Technologist. Career opportunities include hospitals, outpatient imaging centers and physician’s offices.

There are advanced imaging options available to Registered Radiologic Technologists to include but not limited to Magnetic Resonance Imaging (MRI) and Computed Tomography (CT). For additional information concerning other areas of specializations go to www.arrt.org.

A 2010 survey by the American Society of Radiologic Technologists showed the annual salaries averaged about $44,500 for entry-level radiographers. With experience, additional education or supervisory responsibilities, salaries can range from $65,000 - $85,000 per year, depending on area of specialization. Radiologic technologists may have flexible work schedules, including part-time or evenings, giving time for family, friends, school, or other activities.

WSCC Diagnostic Imaging courses have been accepted for transfer to UAB for a Bachelor’s Degree in Health Care Management. Please consult STARS transfer guide for the latest information.

1st Semester

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<th>Course</th>
<th>Title</th>
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<td>Freshman Seminar</td>
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<td>MTH 100</td>
<td>Intermediate College Algebra</td>
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<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
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<tr>
<td>RAD 111</td>
<td>Introduction to Radiography</td>
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<td>RAD 112</td>
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2nd Semester

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<td>RAD 122</td>
<td>Radiographic Procedures II</td>
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3rd Semester
ENG 101  English Composition I  3
RAD 134  Clinical Education III  5
RAD 135  Exposure Principles  3
RAD 136  Radiation Protection and Biology  2
Total  13

4th Semester
PSY 200  General Psychology  3
ENG 102  English Composition II
Or SPH 106  Fundamentals of Oral Comm.  3
RAD 212  Image Evaluation and Pathology  2
RAD 214  Clinical Education IV  8
Total  16

5th Semester
HUM 101  Intro to Humanities  3
RAD 224  Clinical Education V  8
RAD 227  Review Seminar  2
Total  13

TOTAL CREDITS  76

Advanced Imaging Options
The Diagnostic Imaging program also offers two Advanced Imaging options for registry eligible and registered Radiologic Technologists who are interested in preparing for advanced certification in Computed Tomography and Magnetic Resonance Imaging. These courses are available online. Courses also qualify for continuing education credits.

Program of Study
Computed Tomography (CT)
RAD 247  CT Physics and Instrumentation  2
RAD 249  Procedures in CT  3

Magnetic Resonance Imaging (MRI)
RAD 229  Procedures in MRI  3
RAD 244  MRI Physical Principles of Image Formation  2

Admission Requirements
1. Meet all general admission requirements of WSCC.
2. Submit a Wallace State Community College application for admission.
3. Submit documentation of college transcripts and a high school diploma or GED.
4. Copy of your driver’s license.
5. Submit an application for the Advanced Imaging Certificate program.
6. Provide documentation-verifying status as a Radiographer certified by the ARRT or as ARRT eligible.