# Radiologic Technology



CAREER DEGREE

MIDDLETOWN CAMPUS

Accredited by

Joint Review Committee on Education in Radiologic Technology (JRCERT)

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# **Program Description**

The Associate in Applied Science degree program in Radiologic Technology prepares students to apply to take the Registry examination in Radiography offered by the American Registry of Radiologic Technologists to become a radiographer. An essential member of the healthcare team, the radiographer positions body parts accurately and manipulates radiographic equipment to produce a quality diagnostic image with the least amount of radiation necessary.

The Radiologic Technology program is dedicated to providing each student with the educational activities necessary to develop the required critical thinking and technical and interpersonal skills of the radiographer. The highly skilled radiographer is educated in properly caring for the patient's needs during the radiographic examination, manipulates radiographic and computerized equipment, as well as adheres to protocols in bedside and operating room areas, selects technical factors and diagnostic parameters, instructs and assists the patient in order to obtain the necessary positioning, demonstrates appropriate application of radiation safety principles of "time, distance and shielding," in order to protect the patient, self and others, exhibits care and accuracy in the administration, preparation and disposal of drugs and contrast agents.

Note: The Radiologic Technology program, as well as the field of radiologic technology, is a rigorous one. Program standards are not altered for disabled students. The College will make every effort to provide reasonable accommodations to students with disabling conditions.

## **Program Outcomes**

Program Goals:

- 1. Students will demonstrate critical thinking skills
- 2. Students will demonstrate clinical competence in relation to their knowledge and technical skills
- 3. Students will exhibit professional behavior
- 4. Students will demonstrate effective written and oral communication skills

# **Student Learning Outcomes:**

- students will perform routine radiography exams
- students will perform non-routine radiology procedures
- students will evaluate radiographs for diagnostic quality
- Students will demonstrate knowledge through Clinical Test Exams
- students will practice patient safety and radiation protection
- students will demonstrate professional behavior
- students will demonstrate effective oral language skills
- students will demonstrate effective writing skills

#### **Admission Criteria**

Academic requirements:

- high school diploma or HSE
- eligible to take ENG 101 (Freshman English I)
- eligible to take MAT 121 (College Algebra), or have completed MAT 102 (Intermediate Algebra) or equivalent with a 2.0 or higher
- completed High School AP Biology (score of 3, 4, or 5) or a passing grade in the Biology CLEP examination; or introduction to Biology or Anatomy and Physiology 1 with a grade of 2.0 or better (within 5 years of program entry)
- minimum cumulative GPA of 2.5

#### Department-specific requirements:

• attendance at a pre-admission orientation. At this orientation, students will receive and sign off on information pertaining to the Radiologic Technology program including technical standards, health forms, and criminal record policies.

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions office. Consideration for admission is based on the completion of all mandatory academic and

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departmental-specific requirements, highest combination of CGPA and credits completed towards the degree, and seat availability. All requirements must be completed and an eligibility form must be submitted to the Admissions Office before February 1 in order for a student to be considered for acceptance into this program for the Fall semester.

At the time prospective students submit their applications to the American Registry of Radiologic Technologists and the New York State Department of Health, they must make a statement about their conviction record, if any. If they would have to answer "yes" to a question about a felony conviction, they should contact the NYS Department of Health (518) 402-7580 AND The American Registry of Radiologic Technologist (651) 687-0048. Both of these agencies MUST be contacted to determine if students will be eligible to sit for the certification exam and/or to be licensed.

# **Transfer Options**

The A.A.S. degree is primarily intended to prepare students for immediate employment. However, some graduates have gone on to further study in radiation therapy, nuclear medicine, cardiac catheterization and education.

## **Your Career Coach**

Career opportunities

- hospitals, clinics, medical imaging centers, doctors' offices, educational facilities and equipment manufacturers as:
- · radiographers and special procedures technologists
- mammographers, CT technologists and MRI technologists
- nuclear medicine technologists, PET/CT technologists
- · radiation therapists
- sales personnel, educators, clinical instructors and hospital administrators

Explore careers with Career Coach

# **Radiologic Technology Gateway Courses:**

- Gateway courses: MAT 102, BIO \_\_\_\_ (list of options on advising sheet); BIO 110, ENG 101
- Key courses: ENG 101, ENG 102, BIO 111, BIO 112, SOC 101, PSY 111, RAD 219, CIT 100

Courses above have been recommended by the department to help introduce you to the program (Gateway courses) and guide you in selecting courses that will provide you with the best academic experience (Key courses and suggested Electives).

#### **First Semester**

Course #	Course Name	P, C, P/C	Cr
ENG 101	Freshman English 1 (G10A [w] & G11A)	P	3
BIO 111	Anatomy and Physiology 1 (G2A)	P	4
RAD 101	Principles of Radiographic Exposure 1	P/C	4
RAD 103	Introduction to Radiography	P/C	1
RAD 105	Radiographic Positioning 1	P/C	4
<b>RAD 107</b>	Methods of Patient Care 1	P/C	2
<b>RAD 219</b>	Medical Terminology	P	1
	Total Semester Credits		19

#### **Milestones**

#### **During this semester, students should:**

• New students start their first semester/first year every Fall and are called "Junior" students

# **Second Semester**

Course #	Course Name	P, C, P/C	Cr
ENG 102	Freshman English 2 (G7A & G12A)	P	3
BIO 112	Anatomy and Physiology 2 (G2A)	P	4
RAD 102	Principles of Radiographic Exposure 2	P/C	4
<b>RAD 104</b>	Radiation Protection	P/C	1
RAD 106	Radiographic Positioning 2	P/C	4
<b>RAD</b> 108	Methods of Patient Care 2	P/C	1
RAD 111	Clinical Practicum 1	P/C	1
	Total Semester Credits		18

#### **Milestones**

During this semester, students should:

• Spring, second semester Junior students go to clinical for first time and continue going until end of program

# **First Summer Clinical**

Course #	Course Name	P, C, P/C	Cr
RAD 112	Clinical Practicum 2	P	2

#### **Milestones**

## **During this semester, students should:**

- Summer, third semester students are at clinical 8 am to 4 pm
- Make Case Presentation #1

#### **Third Semester**

Course #	Course Name	<b>P</b> , <b>C</b> , <b>P</b> / <b>C</b>	Cr
MAT 121 or	College Algebra or higher (G1A)		3
higher			
PSY 111	Introduction to Psychology (G3A)		3
RAD 209	Radiographic Physics	P/C	2
RAD 213	Clinical Practicum 3	P/C	1.5
RAD 217	Radiographic Positioning 3	P/C	2
RAD 221	Radiographic Pathology	P/C	3
	Total Semester Credits		14.5

#### **Milestones**

### During this semester, students should:

• Fall of the second year, students are now "Seniors" finishing their last year

## **Fourth Semester**

Course #	Course Name	P, C, P/C	Cr
COM 100*	Oral Communication* (G10A [o])	P	1
SOC 101	Introduction to Sociology (G3A & G6A)		3
CIT 100	Computer Literacy		3
RAD 214	Clinical Practicum 4	P/C	1.5
RAD 216	Advanced Imaging Modalities	P/C	3
RAD 218	Radiation Biology	P/C	2
<b>RAD 222</b>	Medical Imaging Ethics & Law		1
	Total Semester Credits		14.5

#### **Milestones**

## **During this semester, students should:**

- · Spring Senior year students apply for graduation, and walk in May Commencement ceremony
- Apply for state license

#### **Second Summer Clinical**

Course #	Course Name	P, C, P/C	Cr
RAD 215	Clinical Practicum 5	P	2

## **Milestones**

# During this semester, students should:

- Finish degree requirements
- Make Case Presentation #2
- Obtain temporary state permit to work when complete
- Set appointment for national boards
- Attend pinning ceremony to celebrate program completion

#### **TOTAL DEGREE CREDITS: 70**

#### Notes:

\*COM 101 satisfies the requirement of COM 100