

# Radiography Education

## RADIOGRAPHY EDUCATION

### Associate in Applied Science (A.A.S.) Degree

The program in Radiography is fully accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) and the NJ DEP Radiologic Technology Board of Examiners.

#### □ Why major in Radiography Education?

There is a national demand for individuals trained in this allied health discipline. Positions are available in hospitals, industry, with private physicians and chiropractors, and clinics. Related jobs can be found in x-ray equipment, manufacturing firms and medical supply companies. Graduates qualify to take the American Registry of Radiologic Technologists Board examination for National Registration as well as New Jersey State Licensure.

#### □ What do students learn by studying Radiography Education?

Extensive study in radiographic principles provides students with comprehensive theoretical and practical knowledge and skills. Instruction takes place in well-equipped classrooms, small group study areas and a laboratory area containing three energized radiographic units with an associated film processing room. The laboratory is also equipped to provide experience in computed radiography, Direct Digital Radiography (DDR) and Patient Archive and Communication Systems (PACS). Clinical practical experience is provided by rotations at affiliated hospitals providing the "hands-on" experience necessary to perform the tasks of an entry-level radiographer. The curriculum also includes the general education and science courses required for the Associate in Applied Science degree.

#### □ Are there any requirements that must be satisfied before taking courses in the major?

- Students must be a U.S. citizen or permanent resident who have been permanently domiciled in the state of New Jersey or the borough of Staten Island, New York\* for at least one year prior to the application process.
- Students must have a "C" or better in high school laboratory biology or an equivalent college course and students must also have a "C" or better in either laboratory chemistry or laboratory physics or an equivalent college course. For admission to the Radiology program your grade in laboratory physics may be substituted for laboratory chemistry however, laboratory chemistry remains a pre-requisite for admission into the program.
- Algebra 1 is a pre-requisite for all majors. Algebra 1 competency may be verified with a passing score on the College's placement test of completion of the appropriate course. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program.
- Students must have a cumulative GPA of 2.75. High school GPA will be used if the student has less than 12 college credits at the time of application.
- When students apply, they must take a Health Technologies entrance examination. A minimum overall score of 75% is required to be eligible for admission.

\*Middlesex County College has a New York Regents accredited clinical training affiliation with a Staten Island, NY hospital.

#### □ Can a student transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### □ How long will it take to complete this degree?

In accordance with NJ State law, this program runs for a minimum of 24 consecutive months. Students must register for major coursework in the summer session of both years. Students can complete the degree in a two-year period.

#### □ Once the student is admitted to this major, are there any special requirements?

Students must meet the academic standards of progress outlined to progress through the curriculum. Students are also required to have completed CPR for health care providers, a criminal background check, a five panel non-DOT drug screening and complete the health physical and required immunizations prior to entering the clinical practice phase of the program.

#### □ Questions?

Contact: the Radiography Education Department at 732.906.2583

## RADIOGRAPHY EDUCATION - CAREER TRACK

### Associate in Applied Science (A.A.S.) Degree - RADC.AAS

*Below are required courses and recommended course groupings and sequences for program completion.*

*Courses may have prerequisite and corequisite requirements. Check course descriptions for details.*

Courses	Credits	Requisites/Comments
<i>Semester I</i>		
RAD 128 Basic Medical Principles	4	
RAD 141 Radiographic Positioning, Anatomy & Pathology I	2	
RAD 142 Radiographic Positioning Laboratory I	1	
RAD 171 Radiographic Imaging and Science I	4	
RAD 190 Clinical Orientation	1	Prerequisite(s): CPR certification for health care professionals, criminal background check, five panel non-DOT drug screening and have completed the health physical and required immunizations.
BIO 131 Human Structure and Function	4	Prerequisite(s): One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 010 and appropriate score on the College's placement test or MAT 013.
____ General Education Social Science Elective (GE SS)	3	
<i>Semester II</i>		
RAD 139 Radiation Protection and Biology	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 143, RAD 144, RAD 172, RAD 210
RAD 143 Radiographic Positioning, Anatomy & Pathology II	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 144, RAD 172, RAD 210
RAD 144 Radiographic Positioning Laboratory II	1	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 144, RAD 172, RAD 210
RAD 172 Radiographic Imaging and Science II	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 143, RAD 144, RAD 210
RAD 210 Clinical Practicum I	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 143, RAD 144, RAD 172
____ General Education Mathematics Elective (GE MST)	3	
____ General Education Elective	3	
<i>Summer Session I</i>		
RAD 145 Radiographic Positioning, Anatomy & Pathology III	3	Prerequisite(s): RAD 139, RAD 143, RAD 144, RAD 172, RAD 210 Corequisite(s): RAD 146
RAD 146 Radiographic Positioning Laboratory III	1	Prerequisite(s): RAD 139, RAD 143, RAD 144, RAD 172, RAD 210 Corequisite(s): RAD 145

<i>Summer Session II</i>		
RAD 220 Clinical Practicum II	2	Prerequisite(s): RAD 145, RAD 146
<i>Semester III</i>		
RAD 247 Radiographic Positioning, Anatomy & Pathology IV	2	Prerequisite(s): RAD 145, RAD 146, RAD 220 Corequisite(s): RAD 230, RAD 248, RAD 273
RAD 248 Radiographic Positioning Laboratory IV	1	Prerequisite(s): RAD 145, RAD 146, RAD 220 Corequisite(s): RAD 230, RAD 247, RAD 273
RAD 275 Radiographic Physics and Equipment Maintenance	3	Prerequisite(s): RAD 145, RAD 146, RAD 172, RAD 220 Corequisite(s): RAD 230, RAD 247, RAD 248
RAD 230 Clinical Practicum III	2	Prerequisite(s): RAD 220 Corequisite(s): RAD 247, RAD 248, RAD 273
ENG 121 English I	3	A passing score on the College's placement test Or a grade of "C" or better in ENG 010.
___ ___ General Education Humanities Elective (GE HUM)	3	
<i>Semester IV</i>		
RAD 250 Clinical Practicum IV	3	Prerequisite(s): RAD 230, RAD 247, RAD 248, RAD 273 Corequisite(s): RAD 256, RAD 285
RAD 256 Radiographic Seminar I	2	Prerequisite(s): RAD 230, RAD 247, RAD 248, RAD 273 Corequisite(s): RAD 250, RAD 285
RAD 285 Advanced Radiographic Imaging	2	Prerequisite(s): RAD 230, RAD 247, RAD 248, RAD 273 Corequisite(s): RAD 250, RAD 256
ENG 122 English Composition II	3	A grade of "C" or better in ENG 121
___ ___ Physical/Health Education Elective	1-3	
CSC 107 Computers in Health Technologies	1	
<i>Summer Session I</i>		
RAD 260 Clinical Practicum V	3	Prerequisite(s): RAD 250, RAD 256, RAD 285
<i>Summer Session II</i>		
RAD 257 Radiographic Seminar II	2	Prerequisite(s): RAD 256, RAD 260

**Total Credits: 71-73**

Standards of Progress:

1. Maintain a cumulative grade point average of 2.0.
2. Must achieve a "C" grade or better in all Radiography courses in order to progress through the curriculum.
3. Must achieve a "C" grade or better in all science courses to satisfy degree requirements.
4. Must complete the Radiography Education program in no fewer than two and no more than five consecutive years from the point of admission to the full-time program track. Students who do not complete the major Radiography course under these conditions may not continue in the program.

## RADIOGRAPHY EDUCATION – TRANSFER TRACK

### Associate in Applied Science (A.A.S.) Degree - RADT.AAS

*Below are required courses and recommended course groupings and sequences for program completion.*

*Courses may have prerequisite and corequisite requirements. Check course descriptions for details.*

Courses	Credits	Requisites/Comments
<i>Semester I</i>		
RAD 128 Basic Medical Principles	4	
RAD 141 Radiographic Positioning, Anatomy & Pathology I	2	
RAD 142 Radiographic Positioning Laboratory I	1	
RAD 171 Radiographic Imaging & Science I	4	
RAD 190 Clinical Orientation	1	Prerequisite(s): CPR certification for health care professionals, criminal background check, five panel non-DOT drug screening and have completed the health physical and required immunizations.
BIO 111 Human Anatomy & Physiology I	4	Prerequisite(s): One year of high school Laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 010 and appropriate score on the College's placement test or MAT 013.
____ General Education Social Science Elective (GE SS)	3	
<i>Semester II</i>		
RAD 139 Radiation Protection and Biology	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 143, RAD 144, RAD 172, RAD 210
RAD 143 Radiographic Positioning, Anatomy & Pathology II	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 144, RAD 172, RAD 210
RAD 144 Radiographic Positioning Laboratory II	1	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 144, RAD 172, RAD 210
RAD 172 Radiographic Imaging & Science II	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 143, RAD 144, RAD 210
RAD 210 Clinical Practicum I	2	Prerequisite(s): RAD 128, RAD 141, RAD 142, RAD 171, RAD 190 Corequisite(s): RAD 139, RAD 143, RAD 144, RAD 172
BIO 112 Human Anatomy & Physiology II	4	Prerequisite(s): BIO 111 A continuation of BIO 111. A study of the Structure and function of the body is continued by examining the endocrine, reproductive, circulatory, digestive, respiratory and excretory systems.

<i>Summer Session I</i>		
RAD 145 Radiographic Positioning, Anatomy & Pathology III	3	Prerequisite(s): RAD 139, RAD 143, RAD 144, RAD 172, RAD 210 Corequisite(s): RAD 146
RAD 146 Radiographic Positioning Laboratory III	1	Prerequisite(s): RAD 139, RAD 143, RAD 144, RAD 172, RAD 210 Corequisite(s): RAD 145
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<i>Summer Session II</i>		
RAD 220 Clinical Practicum II	2	Prerequisite(s): RAD 145, RAD 146
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<i>Semester III</i>		
RAD 247 Radiographic Positioning, Anatomy & Pathology IV	2	Prerequisite(s): RAD 145, RAD 146, RAD 220 Corequisite(s): RAD 230, RAD 248, RAD 273
RAD 248 Radiographic Positioning Laboratory IV	1	Prerequisite(s): RAD 145, RAD 146, RAD 220 Corequisite(s): RAD 230, RAD 247, RAD 273
RAD 275 Radiographic Physics and Equipment Maintenance	3	Prerequisite(s): RAD 145, RAD 146, RAD 172, RAD 220 Corequisite(s): RAD 230, RAD 247, RAD 248
RAD 230 Clinical Practicum III	2	Prerequisite(s): RAD 220 Corequisite(s): RAD 247, RAD 248, RAD 273
ENG 121 English I	3	A passing score on the College's placement test or a grade of "C" or better in ENG 010.
___ ___ General Education Humanities Elective (GE HUM)	3	
___ ___ General Education Mathematics Elective (GE MST)	3	
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<i>Semester IV</i>		
RAD 250 Clinical Practicum IV	3	Prerequisite(s): RAD 230, RAD 247, RAD 248, RAD 273 Corequisite(s): RAD 256, RAD 285
RAD 256 Radiographic Seminar I	2	Prerequisite(s): RAD 230, RAD 247, RAD 248, RAD 273 Corequisite(s): RAD 250, RAD 285
RAD 285 Advanced Radiographic Imaging	2	Prerequisite(s): RAD 230, RAD 247, RAD 248, RAD 273 Corequisite(s): RAD 250, RAD 256
CSC 107 Computers in Health Technologies	1	
ENG 122 English Composition II	3	A grade of "C" or better in ENG 121
___ ___ Physical/Health Education Elective	1-3	
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<i>Summer Session I</i>		
RAD 260 Clinical Practicum V	3	Prerequisite(s): RAD 250, RAD 256, RAD 285
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<i>Summer Session II</i>		
RAD 257 Radiographic Seminar II	2	Prerequisite(s): RAD 256, RAD 260

**Total Credits: 72-74**

Standards of Progress:

1. Maintain a cumulative grade point average of 2.0.
2. Must achieve a "C" grade or better in all Radiography courses in order to progress through the curriculum.
3. Must achieve a "C" grade or better in all science courses to satisfy degree requirements.
4. Must complete the Radiography Education program in no fewer than two and no more than five consecutive years from the point of admission to the full-time program track. Students who do not complete the major Radiography course under these conditions may not continue in the program.

**Contact Name: Radiography Education Department**

**Contact Phone: 732.906.2583**

**Department Web: <http://www.middlesexcc.edu/academi/rad>**