



RADIOGRAPHY - Associate in Applied Science (2018-2019 Catalog)

Student Name: _____

Advisor Name: _____

Developmental Education Courses (if required)

English Placement			Math Placement		
<input type="checkbox"/>	ACLS025	Academic Reading and Writing Skills I	<input type="checkbox"/>	MATH 020	Pre-Algebra
<input type="checkbox"/>	ACLS026	Academic Reading and Writing Skills II	<input type="checkbox"/>	MATH 022	Elementary Algebra
<input type="checkbox"/>	ACLS050	Introduction to Academic Literacy	<input type="checkbox"/>	MATH 026	Intermediate Algebra
<input type="checkbox"/>	ENGL027	Writing Skills Workshop			

SEMESTER-BY-SEMESTER PROGRAM MAP FOR FULL-TIME STUDENTS

Courses are listed in preferred order of completion

Plans can be modified to fit the needs of part-time students by adding more semesters

Choose your courses with your Success Navigator or Faculty Advisor.

Program Entry Requirements:

Admission to the Radiography program at Northampton is on a competitive basis. Minimum admission requirements include:

- Completion of high school diploma or GED equivalent
- Submission of official transcript(s)-high school and each college (attended/enrolled)
- One-year of high school biology with a lab and a grade of C or better; Or BIOS 115 with a grade of C or better
- Two-units of algebra with a grade of C or better; Or MATH 022 and MATH 026, Or MATH 028 with a grade of C or better.
- College courses can be substituted for missing high school requirements.
- Overall GPA of 2.5 or better
- Information session and interview for competitive applicants by the program's admission committee.
- An application packet is available from Admissions with complete application information.
- Application deadline: February 1st.
- After you have been accepted:
- Negative criminal background and child abuse checks (or clearance for positive results) are required prior to program start. Negative drug screening, immunizations and a physical exam are also required.
- CPR (adult/child/infant & AED) certification and health insurance coverage must remain current throughout the length of the program.

Complete	Semester 1 (Fall)					
	Course #	Course Title	Credits	Gen Ed	Term/Location Offered (Fall, Winter, Spring, Summer) (Bethlehem, Monroe, Fowler, Online)	Pre-requisites / Co-requisites (PRE / CO)
<input type="checkbox"/>	COLS101	College Success	1		FA, SP, SU; BETH, MROE, DIST	
<input type="checkbox"/>	BIOS204	Human Anatomy and Physiology I	4	Science	FA, SP, SU; BETH, MROE, DIST	PRE: One year of HS Biology or BIOS107 or 115
<input type="checkbox"/>	RADT102	Fundamentals of Radiologic Sciences	3		FA; BETH	
<input type="checkbox"/>	RADT107	Clinical Practice I	2		FA: Clinical Site - Hospital	
<input type="checkbox"/>	RADT111	Radiographic Procedures I	4		FA: BETH	CO: RADT107
<input type="checkbox"/>	RADT114	Introduction to Radiographic Imaging	3		FA; BETH	
	Total Semester Credits:		17			
Complete	Semester 2 (Spring)					
	Course #	Course Title	Credits	Gen Ed	Term/Location Offered	Pre-requisites/Co-requisites
<input type="checkbox"/>	BIOS254	Human Anatomy and Physiology II	4	Science	F, SP, SU; BETH, MROE, DIST	PRE: BIOS204 with a C or better
<input type="checkbox"/>	ENGL101	English I	3	Communication	FA, SP, SU; BETH, MROE, DIST	PRE: English Placement Policy
<input type="checkbox"/>	RADT117	Clinical Practice II	2		SP; Clinical Site - Hospital	PRE: RADT107, RADT111
<input type="checkbox"/>	RADT125	Sectional Anatomy for Medical Imagers	1		SP; BETH	PRE: BIOS204 PRE or CO: BIOS254
<input type="checkbox"/>	RADT208	Imaging Equipment and Radiation Production	3		SP; BETH	PRE: RADT114
<input type="checkbox"/>	RADT210	Level II Radiographic Procedures	4		SP; BETH	PRE: RADT111
	Total Semester Credits:		17			

Complete	Semester 3 (Summer)					
	Course #	Course Title	Credits	Gen Ed	Term/Location Offered	Pre-requisites/Co-requisites
<input type="checkbox"/>	RADT147	Clinical Practice III	4		SU; Clinical Site – Hospital	PRE: RADT117, RADT210
	Total Semester Credits		4			
Complete	Semester 4 (Fall)					
	Course #	Course Title	Credits	Gen Ed	Term/Location Offered	Pre-requisites/Co-requisites
<input type="checkbox"/>	CMTH102	Introduction to Communication	3	Communication	FA, SP, SU; BETH, MROE, DIST	
<input type="checkbox"/>	MATH140 or MATH150	College Algebra or Introductory Statistics	3	QL	FA, SP, SU; BETH, MROE, DIST	PRE: MATH026 or Math Placement PRE: MATH022 or Math Placement
<input type="checkbox"/>	RADT205	Pathology for Radiographers	2		FA; BETH	
<input type="checkbox"/>	RADT207	Clinical Practice IV	3		FA; Clinical Site - Hospital	PRE: RADT147
<input type="checkbox"/>	RADT230	Radiation Biology/Protection	3		FA; BETH	
<input type="checkbox"/>	RADT242	Digital Imaging and Analysis	2		FA; BETH	PRE: RADT208
	Total Semester Credits:		16			
Complete	Semester 5 (Spring)					
	Course #	Course Title	Credits	Gen Ed	Term/Location Offered	Pre-requisites/Co-requisites
<input type="checkbox"/>	ENGL151L	English II (Literature) (D)	3	Communication	FA, SP, SU; BETH, MROE, DIST	PRE: ENGL101
<input type="checkbox"/>	PSYC103	Introduction to Psychology	3	SSHB	FA, SP, SU; BETH, MROE, DIST	PRE: Reading/Writing competency for ENGL101
<input type="checkbox"/>	RADT201	Advanced Imaging	2		SP; BETH	PRE: RADT208
<input type="checkbox"/>	RADT217	Clinical Practice V	3		SP; Clinical Site - Hospital	PRE: RADT207
<input type="checkbox"/>	RADT250	Senior Review	2		SP; BETH	PRE: RADT207
<input type="checkbox"/>		Elective	3	SIT	FA, SP, SU; BETH, MROE, DIST	
	Total Semester Credits		16			
	Total Degree Credits:		70			

Notes:

- Competitive applicants have completed most, if not all, of the general core courses. The core courses are: Human Anatomy & Physiology I & II, English I & II, Speech Communication, College Algebra (or Introductory Statistics), Intro to Psychology & a free elective (3 credits, 100 level or higher). Applicants are selected for interview sessions based on their GPA and grades on their completed core courses as well as specific High School courses. If you have not taken Anatomy & Physiology I & II and the Math requirement, it is suggested you get them done first. They are weighted more than the other general core courses since they form a foundation for the program course work.
- Competitive applicants (admissions requirements: <http://catalog.northampton.edu/programs-and-majors/radiography.htm>) will receive an invitation to the mandatory Information/Interview sessions during the spring semester. Meeting the minimum requirements does not mean that you will be extended an invitation to be interviewed. The number of applicants invited to the interviews depends on the volume of the applicant pool.
- High School applicants are evaluated based on their High School grades, level of their coursework and any dual enrollment courses. Promising High School applicants will be considered for a limited number of "Pre-Clinical" seats. The Pre-clinical program is essentially a three year plan where new high school graduates are accepted, on a provisional basis, and take the general core courses during the first year. Providing the specified coursework and grade criteria has been met, Pre-clinical students begin the program the second year.
- Human Anatomy and Physiology I is substituted for one of the Human Knowledge Courses.
- The Social Science (SIT) requirement has been included in program courses
- The Diversity and Global Awareness (D) requirement is satisfied by the completion of ENGL 151L.
- Writing Intensive (WI) work and computer competencies are included in various courses in this program. Thus, completing the program automatically satisfies the Writing Intensive (WI) and computing requirements for this program.
- Elective can be any course except: OXX-level courses & EARL 221 & 222

Program Narrative:

- Medical imaging is a dynamic, fascinating field. It's also a critical element of diagnostic medicine. Radiologists rely on their radiographers to produce optimum images for accurate interpretation.
- The modalities in radiology - including sonography, MRI and more - are advancing technologically at an astounding rate. With that in mind, Northampton's Radiography Program introduces its students to all modalities within the curriculum. Our Radiography program is innovative, educationally sound, and vital in providing medical imaging services for the community-at-large.
- Our graduates have the option to remain as general diagnostic radiographers or to cross-train in the following areas/modalities:
 - Computed tomography (CT)
 - Magnetic resonance (MR)
 - Bone densitometry (BD)
 - Mammography (M)
 - Interventional radiology (IR)
 - Nuclear medicine (N)
 - Radiation therapy (T)
 - Diagnostic medical sonography (RDMS)
- Diagnostic Medical Sonography is offered at NCC and is listed in the NCC catalog. Each modality requires additional education (may require transfer to another institution of higher learning) and an additional certification examination.

Program Features:

- The Radiography Program at NCC is 21 months long and operates on both traditional and non-traditional academic calendars. Clinical education at the affiliated hospitals is scheduled during the regular semesters as well as during both summer sessions at the end of the first year for 40 hours per week.
- The Radiography Program has two fully energized radiographic rooms (one digital and the other computed radiography) in the Wogenrich Lab on the Main Campus. The students practice their skills both on-campus and in clinical education.
- When students have completed all of their program requirements, they have the option to voluntarily complete 232-240 hours (6 weeks) in an Advanced Skills Internship in one of the following specialties:
 - Bone Densitometry (BD)
 - Computed Tomography (CT)
 - Interventional Radiology (IR)
 - Magnetic Resonance (MR)
 - Mammography (M)
 - Operating Room (OR)

Program Outcomes:

- To graduate students who are clinically competent. The student will be able to:
 - Position accurately and in a timely manner in order to visualize the appropriate anatomical structures.
 - Select technical factors that will produce an optimal image.
 - Employ principles of radiation protection.
- To graduate students who communicate effectively through word choice, level of explanation, and method of delivery. The student will be able to:
 - Write an accurate patient history.
 - Communicate effectively in written and oral formats with patients, members of the health care team, and the community.
 - Listen, understand, and evaluate what the speaker is saying
 - Speak using effective word choice, appropriate terminology, level of explanation and method of delivery.
- To graduate students who analyze situations using critical thinking to foster better patient care. The student will be able to:
 - Employ critical thinking skills to use appropriate alternative patient positioning and equipment configurations based on patient condition.
 - Critique the image and evaluate radiographic quality.
 - Manipulate exposure factors to compensate for patient and image variability while minimizing patient dose.
- To graduate students who employ the five components of being a true professional – character, attitude, excellence, competency and conduct. The student will be able to:
 - Demonstrate professional attitude, ethics and sound judgment.

Career Information:

Graduates have the option to continue as General Diagnostic Radiographers (Technologists) or to cross-train in the following areas/modalities:

- Computed tomography (CT)
- Magnetic resonance (MR)
- Bone densitometry (BD)
- Mammography (M)
- Interventional radiology (IR)
- Nuclear medicine (N)
- Radiation therapy (T)
- Diagnostic medical sonography (RDMS)

Diagnostic Medical Sonography is offered at NCC and is listed in the NCC catalog.

Each modality requires additional education (may require transfer to another institution of higher learning) and an additional certification examination.

Additional information can be found on the Career Coach webpage: <https://northampton.emsicc.com/careers/radiologic-technologist>