



Didactic and Clinical Overview

General Didactic and Clinical Requirements

The Radiography Program at NCC is an accredited program encompassing 21 consecutive months of required didactic and clinical instruction that prepares the student for their registry exam upon graduation.

The NCC Bethlehem Campus houses two functioning radiographic systems requiring all didactic instruction to be taken at the main campus.

An integral, demanding, and rewarding part of the Radiography Program at Northampton Community College is clinical education (1,568 hours). For an equitable experience, students will be assigned to train at two major hospital sites. One site during the first year followed by the second site the second year. The assigned clinical education sites provide facilities for the student to learn to competently, and proficiently, perform a full range of radiographic procedures on children, adults, and the elderly.

Clinical Site Assignment

When accepted into the Radiography Program, you will be placed in one of our major affiliate hospitals. You will be expected to travel 2-5 days a week on any given semester. We will try to place you as close to your home as possible and take into consideration specific requests that you may have. However, at times there are relatively high numbers of acceptances from a specific geographical area. As a result, we may not be able to place you in a clinical site as close to home as possible or grant specific requests. Therefore, it is advised to plan for possible long-distance commutes requiring reliable transportation.

Sequence of Clinical Education Courses

Clinical Practice I (First year, Fall Semester):

During the first, three-weeks, first-year students remain on the NCC (Bethlehem/Main) campus to receive instruction on the following topics prior to entering their respective clinical sites in September: Radiation protection, handling emergency situations, ethical behavior, Interaction with the patients, communicable diseases, procedures, and the use of universal precautions (isolation), lifting and moving techniques.

Learning is assessed by testing and Practical examinations for lifting and moving techniques, equipment operation, patient handling, and radiation protection.

After the first three-weeks of on-campus preparation, the students go to their assigned clinical education sites on Tuesdays and Thursdays for the remainder of the semester.

Clinical Practice IB (First-year, Winter Session):

When the session begins, around December 13th, the students continue clinical rotations for a total of 14 days (112 hours) before the session ends around January 12th. Rotations are limited to a maximum of forty (40) hours in any one week and 10 hours per day. There are no clinical competencies required in this session and it allows the students the opportunity to gain experience and perform the range of exams they have learned to date.

Clinical Practice II (First-year, Spring Semester):

When the semester begins, around January 16th, the students continue the Tuesday and Thursday clinical education schedule for the remainder of the semester.

The students present their first image critiques (major, minor, and surprise), continue to log procedures, and perform competency evaluations.

Clinical Practice III (First-year, Summer Sessions I and II):

The course begins with the opening of Summer Session I and ends with the conclusion of Summer Session II. There is a one-week intensive seminar on campus during the first week of the course concluding with online testing the same week.

The student returns to clinical education during the second week of the (first) summer session where they participate in the clinical setting Monday-Thursday for 10 hours per day for a maximum of forty (40) hours in any one week. Each day consists of not more than 9.5 hours of clinical with a 30-minute lunch break. If the normal break time at a site is longer, the clinical practice time must be reduced to maintain a 10 hour per day limit. When the student has reached 336 hours of clinical time (38 days at 9.5 hrs., 39 days at 9.25 hrs. etc.), which should occur after approximately the first week in August, they may utilize the time remaining until the official end of the Summer II Session for any needed make-up time. Clinical sites may require Monday-Friday rotations of 8 hours (plus lunch) due to supervisory staffing requirements.

There is one (1) week of middle shift (approx. 2:00 p.m. – 12:00 a.m.) rotation. The purpose is to broaden the clinical experience with a more varied patient population and do more trauma-type procedures.

The students continue to practice procedures, perform competency evaluations, and do image critiques (major, minor, and surprise). The students often “bank” competency evaluations ahead for the Fall semester. The constant repetition of the radiographic procedures during the summer months helps the students become more competent and proficient. There is a significant and very noticeable improvement in the students’ abilities and confidence over the summer.

There is a two-day rotation in CT so that the students have a good understanding of the modality due to its capabilities and widespread usage in imaging.

There is no clinical scheduled on Memorial Day or July 4th and students are never assigned to didactic classes or clinical practice for more than forty-hours in any one week.

Clinical Practice IV (Second year, Fall Semester):

The students are assigned to their clinical education sites for three-days per week (Mondays, Wednesdays, and Fridays). **Beginning this semester, students rotate to a different clinical site.** This is to abide by our accreditation standard that our students are given an equitable clinical experience.

The students continue to practice, log procedures, perform competency evaluations, do image critique evaluation presentations, and complete three proficiency evaluations. The three proficiency evaluations are randomly assigned to the students by the Clinical Instructor(s) or Clinical Education Coordinator to ensure that the students are maintaining their skills post-competency.

Clinical Practice V (Spring Semester, Second year):

When the semester begins, around January 16th, the students resume their clinical education rotations at their second clinical site. The schedule continues Mondays, Wednesdays, and Fridays for the remainder of the semester.

The students continue to practice, log procedures, perform competency evaluations, do image critique evaluation presentations, and complete three proficiency evaluations.

There are three days of **Student Choice** rotations when students can spend time in a specialty modality. The purpose/goal of the rotations is to help the students decide if they would like to pursue further education in any one of the specialty areas in radiology after they have completed the radiography program. Or, if the students self-identify a weakness in a routinely scheduled area, they may wish to further practice their skills in that area to gain more competency/proficiency. Ultimately, the choice is up to the student according to their needs or desires.

At the conclusion of Clinical Practice V, if all program requirements have been met, the student is eligible for May graduation.

Six (6)-week Extension of Clinical Practice V

The six (6)-week extension is mandatory for those students who are unable to complete all their clinical education requirements on time. The extension consists of forty hours per week of clinical experience in order to complete unmet course requirements, e.g., competency evaluations. Even if the student completes everything during the first week of the six (6)-week extension, he or she is required to stay for the remainder of the six (6)-weeks to gain more proficiency.

Upon successful completion of this extension, and consequently meeting the program graduation requirements, the student would be eligible to sit for the American Registry of Radiologic Technologist's (ARRT) certification examination.

American Registry of Radiologic Technologists (ARRT) Certification Examination for Radiographers

Upon satisfactory completion of both the didactic (classroom) and clinical education courses, the graduate is eligible to sit for the certification examination offered by the ARRT.

Passing the registry examination certifies that the graduate is a registered radiographer and he or she can write the initials RT(R) after his or her name.

Advanced Skills Internship

As part of the College's Community Education Offerings (Center for Business and Industry, Healthcare Education) current year (May) Radiography graduates are offered the opportunity to participate in a voluntary Advanced Skills Internship (ASI) in the following areas:

- Bone Densitometry (BD)
- Computed Tomography (CT)
- Interventional Radiography (IR)
- Magnetic Resonance Imaging (MR)
- Mammography (M)
- Surgery (OR)

The goal of the ASI is to help the students gain clinical practice in a particular specialty area (imaging modality) and often serves as a "stepping-stone" into the specialty area. It includes approximately 232 hours of clinical practice, competency evaluations, image/film critiques, technologist evaluation and the Mentor's evaluation. An application and additional fee are required, and **selective admission** is determined by the Radiography Department based on the availability of clinical openings. Clinical openings vary from year to year based on facility staffing and other considerations.

Note: ASI (pass/fail) requirements for completion:

- Competency evaluations
- Image critique evaluation presentation
- 3 technologist evaluations
- Mentor's evaluation

After all the ASI requirements have been met, a certificate of recognition for completion is awarded to the intern. Since the ASI is not a component of the NCC Radiography Program, the students are eligible to sit for their Radiography certification examination regardless of ASI completion status.

**Typical Classroom and Clinical Education Schedules
Radiography Coursework Only
(Times Subject to Change)**

Note: Start times for clinical practice may vary anywhere from **6:00 a.m. – 9:00 a.m.** depending on the area of rotation and the scheduling for radiographic / fluoroscopic examination / procedures.

**First-Year, Fall Semester
Radiography Program Schedule**

| | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | | |
|-------------|----------------------|-----------------------------------|----------------------|-----------------------------------|-------------------|--|----------------------|
| 8:00-8:30 | *Procedures I Lab | Clinical Practice Hospital | *Procedures I Lab | Clinical Practice Hospital | *Procedures I Lab | | |
| 8:30-9:00 | | | | | | | |
| 9:00- 9:30 | | | | | | | |
| 9:30-10:00 | | | | | | | |
| 10:00-10:30 | | | | | | | |
| 10:30-11:00 | | | | | | | |
| 11:00-11:30 | Intro to Rad Imaging | | Procedures I Lecture | | Fundamentals | | |
| 11:30-12:00 | | | | | | | |
| 12:00-12:30 | | | | | | | |
| 12:30-1:00 | Fundamentals | | | | | | Procedures I Lecture |
| 1:00-1:30 | | | | | | | |
| 1:30-2:00 | | | | | | | |
| 2:00-2:30 | | Intro to Rad Imaging | | | | | |
| 2:30-3:00 | | | | | | | |
| 3:00-3:30 | | | | | | | |
| 3:30-4:00 | | | | | | | |
| 4:00-4:30 | | | | | | | |
| 4:30-5:00 | | | | | | | |
| 5:00-5:30 | | | | | | | |

KEY: * 1 of 3 options for lab

**First-Year, Winter Session
Radiography Program Schedule**

Clinical Practice IB: Clinical rotations begin immediately after fall semester and end after 112 hours have been achieved. Never more than 40 hours scheduled in any one week and no clinicals when the college is closed.

**First-Year, Spring Semester
Radiography Program Schedule**

| Time | Monday | Tuesday | Wednesday | Thursday | Friday | |
|-------------|-----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|--|
| 8:00–8:30 | *Level II Rad Procs. Lab | Clinical Practice Hospital | *Level II Rad Procs. Lab | Clinical Practice Hospital | *Level II Rad Procs. Lab | |
| 8:30–9:00 | | | | | | |
| 9:00–9:30 | | | | | | |
| 9:30–10:00 | | | | | | |
| 10:00–10:30 | | | | | | |
| 10:30–11:00 | | | | | | |
| 11:00–11:30 | Level II Rad Procs. Lecture | | Level II Rad Procs. Lecture | | Imaging Equip & Rad. Prod. | |
| 11:30–12:00 | | | | | | |
| 12:00–12:30 | | | | | | |
| 12:30–1:00 | | | | | | |
| 1:00–1:30 | Imaging Equip & Rad. Prod. | | | | | |
| 1:30–2:00 | | | | | Sectional Anatomy | |
| 2:00–2:30 | | | | | | |
| 2:30–3:00 | | | | | | |
| 3:00–3:30 | | | | | | |
| 3:30–4:00 | | | | | | |
| 4:00–4:30 | | | | | | |
| 4:30–5:00 | | | | | | |

KEY: * 1 of 3 options for lab

First-Year, Summer Sessions Radiography Program Schedule

Clinical Practice III: 40-hours per week with never more than 40-hours scheduled in any one week.

(4) 10-hour days per week Monday-Thursday (9.5 hours + lunch) or

(5) 8.5-hour days per week Monday-Friday (8 hours + lunch)

Includes both Summer Sessions (I & II), without a break in between the sessions:

- First week – seminar on campus (Bethlehem/Main) with online testing on Friday of the same week
- One week of middle (second) shift
- Memorial Day & July 4th are scheduled holidays, no clinical
- Start times vary according to the assigned rotational area.
- Clinical rotations end after 336 hours. There are enough days in the summer sessions to allow for some scheduled time off during the summer.

Second Year, Fall Semester Radiography Program Schedule

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|-------------|----------------------------|------------------------------|----------------------------|------------------------------|----------------------------|
| 8:00–8:30 | Clinical Practice Hospital | Pathology for Radiographers | Clinical Practice Hospital | Pathology for Radiographers | Clinical Practice Hospital |
| 8:30–9:00 | | | | | |
| 9:00–9:30 | | Digital Imaging and Analysis | | Digital Imaging and Analysis | |
| 9:30–10:00 | | | | | |
| 10:00-10:30 | | Radiation Biology | | Radiation Biology | |
| 10:30-11:00 | | | | | |
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**Second-Year, Spring Semester
Radiography Program Schedule**

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|-------------|----------------------------------|------------------------------------------------------------------|----------------------------------|---------------------|----------------------------------|
| 8:00–8:30 | Clinical Practice Hospital | Senior Review Lab (Meets 5 times in the semester) | Clinical Practice Hospital | Advanced Imaging | Clinical Practice Hospital |
| 8:30–9:00 | | | | | |
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| 4:00–4:30 | | | | | |
| 4:30–5:00 | | | | | |
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Clinical Practice V:

Includes:

- Three (3) days of **Student Choice Rotation**
- **6-week extension:** as needed basis, when clinical education requirements are not completed