

# RADIOGRAPHY, ASSOCIATE IN APPLIED SCIENCE



College(s): MX

Program Code: 0246

The AAS in Radiography is the study of the theory, technical skills, patient care, and techniques necessary to use radiation in the diagnosis of disease. Completion of the program can lead to employment as an x-ray technologist or radiographer in private and public hospitals, clinics, and laboratories. The AAS degree in Radiography provides the necessary professional skills, progressive maturity, and the intellectual, social, and emotional values necessary for a graduate to be a trustworthy member of the healthcare team.

***This selective admissions program requires students to submit a separate application or to take additional action before enrolling.***

For more information on the Radiography program at Malcolm X College, visit the program webpage (<http://www.ccc.edu/colleges/malcolm-x/departments/Pages/Radiography.aspx>).

## Program Requirements

| Code                                | Title   | Hours |
|-------------------------------------|---|-------|
| <b>Program Prerequisites</b>        |   |       |
| MATH 118                            | General Education Math (or higher Mathematics course) |       |
| BIOLOGY 116                         | Introduction to Anatomy And Physiology <sup>1</sup>   |       |
| HEAPRO 102                          | Health Career Studies <sup>2</sup>                    |       |
| <b>General Education Coursework</b> |   |       |
| ENGLISH 101                         | Composition   | 3     |
| PHYSICS 131                         | Mechanics And Power (or higher)                       | 3     |
| PSYCH 201                           | General Psychology                                    | 3     |
| SPANISH 193                         | Spanish for Radiography <sup>3</sup>                  | 3     |
| <b>Required Program Core</b>        |   |       |
| RADIOGR 101                         | Intro To Radiation Sciences                           | 2     |

|             |                                    |   |
|-------------|------------------------------------|---|
| RADIOGR 102 | Attitudes In Patient Care          | 2 |
| RADIOGR 105 | Imaging Physics                    | 4 |
| RADIOGR 115 | Basic Prins Of Image Produc        | 3 |
| RADIOGR 124 | Intro To Patient Care              | 2 |
| RADIOGR 128 | Image Evaluation                   | 1 |
| RADIOGR 131 | Radiographic Procedures I          | 2 |
| RADIOGR 140 | Intro To Clinical Education        | 3 |
| RADIOGR 141 | Radiography Clinical Education I   | 3 |
| RADIOGR 200 | Pathology                          | 4 |
| RADIOGR 202 | Radiology Management               | 1 |
| RADIOGR 205 | Applied Radiographic Techniques    | 3 |
| RADIOGR 206 | Imaging                            | 2 |
| RADIOGR 208 | Radiobiology                       | 3 |
| RADIOGR 232 | Radiographic Procedures II         | 4 |
| RADIOGR 233 | Radiographic Procedures III        | 4 |
| RADIOGR 234 | Special Radiographic Procedure     | 2 |
| RADIOGR 242 | Radiography Clinical Ed II         | 4 |
| RADIOGR 243 | Radiography Clinical Education III | 4 |
| RADIOGR 244 | Radiography Clinical Education IV  | 4 |

**Total Hours** **69**

- <sup>1</sup> BIOLOGY 226 Human Structure and Function I and BIOLOGY 227 Human Structure and Function II may substitute  
<sup>2</sup> BIOLOGY 120 Terminology For Medical Careers may substitute  
<sup>3</sup> Or other HD general education course (<https://catalog.ccc.edu/hd/>)

At least one course must meet the Human Diversity (HD) requirement

## Pathway

This is an **example course sequence** for students interested in earning a degree in Radiography. It does not represent a contract, nor does it

guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Radiography.

Upon completion of the program of study, graduates become eligible to take the national certification exam offered by the American Registry of Radiologic Technologists (ARRT). In addition, graduates may apply for a license from the Illinois Emergency Management Agency/Division of Nuclear Safety.

Prospective students must apply for admission into the Radiography program.

## FALL COHORT - Semester-by-Semester Program Plan for Full-Time Students

| Semester 1         |                                    | Hours     |
|--------------------|------------------------------------|-----------|
| <b>Fall</b>        |                                    |           |
| RADIOGR 101        | Intro To Radiation Sciences        | 2         |
| RADIOGR 102        | Attitudes In Patient Care          | 2         |
| RADIOGR 115        | Basic Prins Of Image Produc        | 3         |
| RADIOGR 124        | Intro To Patient Care              | 2         |
| ENGLISH 101        | Composition <sup>1</sup>           | 3         |
| <b>Hours</b>       |                                    | <b>12</b> |
| <b>Semester 2</b>  |                                    |           |
| <b>Spring</b>      |                                    |           |
| RADIOGR 105        | Imaging Physics                    | 4         |
| RADIOGR 128        | Image Evaluation                   | 1         |
| RADIOGR 131        | Radiographic Procedures I          | 2         |
| RADIOGR 140        | Intro To Clinical Education        | 3         |
| PHYSICS 131        | Mechanics And Power <sup>1</sup>   | 3         |
| <b>Hours</b>       |                                    | <b>13</b> |
| <b>Semester 3</b>  |                                    |           |
| <b>Summer</b>      |                                    |           |
| RADIOGR 141        | Radiography Clinical Education I   | 3         |
| RADIOGR 232        | Radiographic Procedures II         | 4         |
| <b>Hours</b>       |                                    | <b>7</b>  |
| <b>Semester 4</b>  |                                    |           |
| <b>Fall</b>        |                                    |           |
| RADIOGR 205        | Applied Radiographic Techniques    | 3         |
| RADIOGR 208        | Radiobiology                       | 3         |
| RADIOGR 233        | Radiographic Procedures III        | 4         |
| RADIOGR 242        | Radiography Clinical Ed II         | 4         |
| PSYCH 201          | General Psychology <sup>1</sup>    | 3         |
| <b>Hours</b>       |                                    | <b>17</b> |
| <b>Semester 5</b>  |                                    |           |
| <b>Spring</b>      |                                    |           |
| RADIOGR 200        | Pathology                          | 4         |
| RADIOGR 206        | Imaging                            | 2         |
| RADIOGR 234        | Special Radiographic Procedure     | 2         |
| RADIOGR 243        | Radiography Clinical Education III | 4         |
| SPANISH 193        | Spanish for Radiography (HD)       | 3         |
| <b>Hours</b>       |                                    | <b>15</b> |
| <b>Semester 6</b>  |                                    |           |
| <b>Summer</b>      |                                    |           |
| RADIOGR 202        | Radiology Management               | 1         |
| RADIOGR 244        | Radiography Clinical Education IV  | 4         |
| <b>Hours</b>       |                                    | <b>5</b>  |
| <b>Total Hours</b> |                                    | <b>69</b> |

<sup>1</sup> General Education Requirement

## SPRING COHORT - Semester-by-Semester Program Plan for Full-Time Students

| Semester 1         |  | Hours     |
|--------------------|--|-----------|
| <b>Spring</b>      |  |           |
| RADIOGR 101        | Intro To Radiation Sciences                  | 2         |
| RADIOGR 102        | Attitudes In Patient Care                    | 2         |
| RADIOGR 115        | Basic Prins Of Image Produc                  | 3         |
| RADIOGR 124        | Intro To Patient Care                        | 2         |
| ENGLISH 101        | Composition <sup>1</sup>                     | 3         |
| <b>Hours</b>       |  | <b>12</b> |
| <b>Semester 2</b>  |  |           |
| <b>Summer</b>      |  |           |
| RADIOGR 131        | Radiographic Procedures I                    | 2         |
| RADIOGR 140        | Intro To Clinical Education                  | 3         |
| <b>Hours</b>       |  | <b>5</b>  |
| <b>Semester 3</b>  |  |           |
| <b>Fall</b>        |  |           |
| RADIOGR 105        | Imaging Physics                              | 4         |
| RADIOGR 128        | Image Evaluation                             | 1         |
| RADIOGR 141        | Radiography Clinical Education I             | 3         |
| RADIOGR 232        | Radiographic Procedures II                   | 4         |
| PHYSICS 131        | Mechanics And Power (or higher) <sup>1</sup> | 3         |
| <b>Hours</b>       |  | <b>15</b> |
| <b>Semester 4</b>  |  |           |
| <b>Spring</b>      |  |           |
| RADIOGR 205        | Applied Radiographic Techniques              | 3         |
| RADIOGR 208        | Radiobiology                                 | 3         |
| RADIOGR 233        | Radiographic Procedures III                  | 4         |
| RADIOGR 242        | Radiography Clinical Ed II                   | 4         |
| PSYCH 201          | General Psychology <sup>1</sup>              | 3         |
| <b>Hours</b>       |  | <b>17</b> |
| <b>Semester 5</b>  |  |           |
| <b>Summer</b>      |  |           |
| RADIOGR 200        | Pathology                                    | 4         |
| RADIOGR 243        | Radiography Clinical Education III           | 4         |
| <b>Hours</b>       |  | <b>8</b>  |
| <b>Semester 6</b>  |  |           |
| <b>Fall</b>        |  |           |
| RADIOGR 202        | Radiology Management                         | 1         |
| RADIOGR 206        | Imaging                                      | 2         |
| RADIOGR 234        | Special Radiographic Procedure               | 2         |
| RADIOGR 244        | Radiography Clinical Education IV            | 4         |
| SPANISH 193        | Spanish for Radiography (HD)                 | 3         |
| <b>Hours</b>       |  | <b>12</b> |
| <b>Total Hours</b> |  | <b>69</b> |

<sup>1</sup> General Education Requirement

Choose your courses with your College Advisor.

## Program Admission Requirements

The program is very competitive, and having the minimum requirements does not indicate that you will be accepted into the program. Students having less than minimum requirements will not be considered. In order to enter the program students must:

- 18 years of age or older
- Grade of "C" or better in:

| Code        | Title   | Hours |
|-------------|---|-------|
| MATH 118    | General Education Math (or higher Mathematics course) | 4     |
| BIOLOGY 116 | Introduction to Anatomy And Physiology <sup>1</sup>   | 4     |
| HEAPRO 102  | Health Career Studies <sup>2</sup>                    | 3     |

<sup>1</sup> BIOLOGY 226 Human Structure and Function I and BIOLOGY 227 Human Structure and Function II may substitute

<sup>2</sup> BIOLOGY 120 Terminology For Medical Careers may substitute

- Official college transcripts
- 2.7 College GPA
- Complete the application packet
- For application details, please visit the Radiography page on [www.ccc.edu](https://www.ccc.edu/colleges/malcolm-x/departments/Pages/Radiography.aspx) (<https://www.ccc.edu/colleges/malcolm-x/departments/Pages/Radiography.aspx>)

Students that meet all of the minimum admission requirements listed above will be scheduled for an interview with the program director. Students that complete this interview will be considered for admission to the program. Please note that admission is highly competitive and that not all students who are interviewed will be admitted. Students are advised to prepare for the interview, to arrive early, and to dress appropriately for a professional interview. Students are also advised to carefully prepare their application, giving special attention to content and format.

## Background Check

Students entering most healthcare professions programs will be required to present documentation of health history and vaccination status, to undergo annual tuberculosis screening, to submit to a background check, to submit to initial and random drug screening, and to undergo fingerprinting prior to licensing with the state of Illinois. Students should consult with an advisor if any of these requirements are a concern.

## Physical Requirements Needed for Successful Performance in the Clinical Area

A person working in the field as a radiographer may be required to perform many extraneous and laborious tasks. Patient care in the clinical area requires excellent communication and language skills.

Therefore all students must be able to:

- Stand on their feet for approximately 8 hours.
- Push and/or pull patients with weights that may exceed 200 lbs.
- Communicate in English well enough so that you can be understood by others, and others can understand you.
- Execute both hand and pedal dexterity.
- Give directions and respond to patient requests.
- Operate portable equipment.
- Visually critique a film.

- Exhibit good hearing ability and is able to exercise good body mechanics.
- Lift and carry various accessory equipment.

For more information on admissions and the application process, visit the Radiography program webpage (<http://www.ccc.edu/colleges/malcolm-x/departments/Pages/Radiography.aspx>).

## Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (<https://www.ccc.edu/departments/Pages/Career-Services.aspx>).

## Radiologic Technologists and Technicians

### Job Description

Take x-rays and CAT scans or administer nonradioactive materials into patient's bloodstream for diagnostic or research purposes. Includes radiologic technologists and technicians who specialize in other scanning modalities.

### Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

| Annual Wages                             |          |
|--|----------|
| Entry-Level 10 <sup>th</sup> Percentile  | \$48,120 |
| Median 50 <sup>th</sup> Percentile       | \$65,746 |
| Senior-Level 90 <sup>th</sup> Percentile | \$96,301 |

| Hourly Wages                             |      |
|--|------|
| Entry-Level 10 <sup>th</sup> Percentile  | \$23 |
| Median 50 <sup>th</sup> Percentile       | \$32 |
| Senior-Level 90 <sup>th</sup> Percentile | \$46 |

### Annual Job Openings

176 annual openings in Cook County

### National Education Attainment

Here, you can see the level of education that people in this career complete.

| Degree Program                | % of Jobs |
|-------------------------------|-----------|
| A high school diploma or less | 0.00%     |
| A certificate                 | 16.52%    |
| Some college                  | 0.00%     |
| An Associate degree           | 72.85%    |
| A Bachelor's degree           | 10.63%    |

**A Master's or Professional degree** 0.00%  
**A Doctoral degree or more** 0.00%

10.63% continue their education beyond an associate degree