BIOMEDICAL SCIENCES, BS: RADIOLOGIC TECHNOLOGY

Students in the Biomedical Sciences major are awarded a Bachelor of Science degree upon completion of all requirements. Students choose from one of the following seven areas or submajors:

- Medical Laboratory Science
- Biomedical Science
- Cytotechnology
- Radiologic Technology
- Diagnostic Medical Sonography
- Diagnostic Imaging (degree completion program)
- Health Science (degree completion program)
- Public Health Microbiology

All students will be required to comply with a background check, drug screen, and maintain health insurance during the professional training experience.

Radiologic Technology

Radiologic technologists, or radiographers, use X-Rays and administer contrast media to produce images of the human skeleton, chest, digestive tract, and urinary system. The radiographer works closely with the radiologist or physician. Students complete the first two years of prerequisite courses on campus before applying for placement into the professional education portion of the curriculum. Once accepted into the professional education component of the program, students will take didactic and clinical education courses concurrently. Upon successful completion of the Bachelor of Science degree, students are eligible to write the national registry exam administered by the American Registry of Radiologic Technologists (www.arrt.org (https://www.arrt.org/)).

The Radiologic Technology professional education programs are accredited by:

Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Dr., Suite 2850, Chicago, IL 60606. www.jrcert.org (http://www.jrcert.org/)

Requirements

Students pursuing the Biomedical Sciences: Radiologic Technology submajor complete the freshman and sophomore years on campus. Students accepted into the professional education curriculum complete the junior and senior years at either the on-campus UWM radiography program or off campus through external radiography programs offered at Froedtert Hospital in Milwaukee, UW Hospital & Clinics in Madison, Wheaton Franciscan All Saints in Racine, and Wheaton Franciscan St. Joseph in Milwaukee. Students are responsible for any relocation and all living expenses during clinical education.

The minimum degree requirement is 120 credits, including the following. Entry into the professional major is competitive, with the minimum requirements listed below. Completion of the minimum requirements does not guarantee admission.

1. Completion of UWM's General Education Requirements (GER) (https://catalog.uwm.edu/policies/undergraduate-policies/#bachelorsdegreegeneraleducation);
2. A cumulative UWM minimum grade point average of 2.5;
3. Completion of all required courses and electives (56 credits) in the freshman and sophomore semesters with a cumulative GPA of 2.5; a maximum of 4 courses may be repeated once.
4. Successful completion of the professional education application process to include an interview with the UWM radiography program and on-site interviews with the affiliated radiography programs;
5. Successful completion of a background check, health physical, and drug screen prior to the beginning of the professional curriculum, and maintenance of health insurance and CPR certification for the duration of the professional curriculum;
6. Students are required to earn a grade of C or better in the following:

Code	Title	Credits
BIO SCI 202	Anatomy and Physiology I	4
BIO SCI 203	Anatomy and Physiology II	4
BMS 301	Human Pathophysiology: Fundamentals	1
BMS 302	Human Pathophysiology: Organ Systems I	1
BMS 303	Human Pathophysiology: Organ Systems II	1
BMS 304	Human Pathophysiology: Organ Systems III	1
BMS 305	Human Pathophysiology: Organ Systems IV	1
CHEM 100	Chemical Science	4
DMI 300	Diagnostic Medical Imaging Fundamentals	2

7. Completion of a job-shadowing experience in an imaging department with a Radiologic Technology professional prior to applying for placement into the professional education component is required; and
8. Completion of a CNA (Certified Nursing Assistant) course is highly recommended, but not required. View a list of WI nurse aide training programs at www.dhs.wisconsin.gov/caregiver/ (http://www.dhs.wisconsin.gov/caregiver/).

Admission into the professional curriculum is competitive and final admission decisions rest with the program directors. Admission is not guaranteed. To remain eligible to continue in the professional education curriculum, students must adhere to all policies and procedures of the program they are attending. Once accepted into the professional education curriculum students will be provided with a copy of the program's policies and procedures.

An example of the radiologic technology curriculum may be found on the Plan of Study tab.

Code	Title	Credits
Pre-Professional Requirements		
General Education Requirements		
Oral and Written Communication (OWC) Competency Part A & B		
Quantitative Literacy (QL) Competency Part A and B		
Foreign Language Competency		
Arts		3
Humanities		3
Natural Sciences [1]		

Social Sciences [1]		
Cultural Diversity [1]		
Major Requirements		
BIO SCI 202	Anatomy and Physiology I	4
BIO SCI 203	Anatomy and Physiology II	4
BMS 205	Foundations of Diagnostic Science: Exploring Health, Technology, and Ethics	3
BMS 301	Human Pathophysiology: Fundamentals	1
BMS 302	Human Pathophysiology: Organ Systems I	1
BMS 303	Human Pathophysiology: Organ Systems II	1
BMS 304	Human Pathophysiology: Organ Systems III	1
BMS 305	Human Pathophysiology: Organ Systems IV	1
CHEM 100	Chemical Science [2]	4
CHPS 222	Language of Medicine	3
CHPS 245	Client Diversity in Health Sciences: An Interdisciplinary Perspective (SS/CD) [3]	3
COMSDIS 250	Interprofessional Communication in the Health Sciences (SS)	3
COMMUN 103	Public Speaking (HU)	3
DMI 101	Introduction to Medical Imaging	1
DMI 300	Diagnostic Medical Imaging Fundamentals	2
ENGLISH 207	Health Science Writing (OWCB)	3
HCA 102	Healthcare Delivery in the United States	3
HCA 224	Computational Tools for Healthcare Professionals	3
HCA 251	Health Documentation	1
KIN 270	Statistics in the Health Professions: Theory and Practice (QLB) [4]	3
Professional & Clinical Training		
DMI 306	Imaging Procedures I	5
DMI 307	Seminar in Radiography I	3
DMI 308	Imaging Procedures II	5
DMI 309	Imaging Procedures III	3
DMI 350	Introduction to Radiologic Science and Healthcare	2
DMI 351	Radiation Protection	2
DMI 353	Principles of Imaging I	3
DMI 355	Radiography Clinical Education I	3
DMI 360	Radiation Biology	2
DMI 362	Principles of Imaging II	3
DMI 364	Radiography Clinical Education II	3
DMI 372	Radiographic Clinical Education III	4
DMI 401	Seminar in Radiography II	2
DMI 470	Radiographic Physics	2
DMI 473	Imaging Procedures IV	2
DMI 474	Radiography Clinical Education IV	3
DMI 475	Seminar in Radiography III	2
DMI 477	Cross Sectional Anatomy	3
DMI 478	Radiologic Pathology	3
DMI 479	Radiography Clinical Education V	3
DMI 480	Seminar in Radiography IV	2
DMI 485	Professional Development in Radiography	2
DMI 486	Radiography Clinical Education VI	4
Total Credits		**120**

1 Credit may be utilized in required curriculum areas.
2 CHEM 101, CHEM 102, or CHEM 103 may substitute for CHEM 100.
3 NURS 101 may substitute for CHPS 245.
4 MTHSTAT 215 may substitute for KIN 270.

Pre-Professional Training Requirements

Year 1		
Fall		**Credits**
BIO SCI 202	Anatomy and Physiology I *	4
BMS 205	Foundations of Diagnostic Science: Exploring Health, Technology, and Ethics	3
CHEM 100	Chemical Science *	4
DMI 101	Introduction to Medical Imaging	1
COMMUN 103	Public Speaking (HU)	3
	Credits	**15**
Spring		
BIO SCI 203	Anatomy and Physiology II *	4
HCA 102	Healthcare Delivery in the United States	3
CHPS 222	Language of Medicine	3
KIN 270	Statistics in the Health Professions: Theory and Practice (QLB)	3
	Credits	**13**
Year 2		
Fall		
BMS 301	Human Pathophysiology: Fundamentals *	1
BMS 302	Human Pathophysiology: Organ Systems I *	1
BMS 303	Human Pathophysiology: Organ Systems II *	1
COMSDIS 250	Interprofessional Communication in the Health Sciences (SS)	3
HCA 224	Computational Tools for Healthcare Professionals	3
HCA 251	Health Documentation	1
DMI 300	Diagnostic Medical Imaging Fundamentals *	2
	Credits	**12**
Spring		
CHPS 245	Client Diversity in Health Sciences: An Interdisciplinary Perspective (SS/CD)	3
BMS 304	Human Pathophysiology: Organ Systems III *	1
BMS 305	Human Pathophysiology: Organ Systems IV *	1
ENGLISH 207	Health Science Writing (OWCB)	3
GER Arts		3
GER Humanities		3
	Credits	**14**
	Total Credits	**54**

* Requires grade of C or better.

Professional Training Curriculum Course List:

(*Example of radiologic technology curriculum provided below. Curriculum course list and sequence provided to student upon advancement to major.)*

Year 3		
Fall		**Credits**
DMI 306	Imaging Procedures I	5
DMI 350	Introduction to Radiologic Science and Healthcare	2
DMI 351	Radiation Protection	2
DMI 353	Principles of Imaging I	3
DMI 355	Radiography Clinical Education I	3
	Credits	**15**
Spring		
DMI 307	Seminar in Radiography I	3
DMI 308	Imaging Procedures II	5
DMI 362	Principles of Imaging II	3
DMI 364	Radiography Clinical Education II	3
	Credits	**14**
Summer		
DMI 309	Imaging Procedures III	3
DMI 372	Radiographic Clinical Education III	4
	Credits	**7**
Year 4		
Fall		
DMI 470	Radiographic Physics	2
DMI 473	Imaging Procedures IV	2
DMI 480	Seminar in Radiography IV	2
DMI 474	Radiography Clinical Education IV	3
DMI 477	Cross Sectional Anatomy	3
	Credits	**12**
Spring		
DMI 360	Radiation Biology	2
DMI 401	Seminar in Radiography II	2
DMI 475	Seminar in Radiography III	2
DMI 478	Radiologic Pathology	3
DMI 479	Radiography Clinical Education V	3
	Credits	**12**
Summer		
DMI 485	Professional Development in Radiography	2
DMI 486	Radiography Clinical Education VI	4
	Credits	**6**
	Total Credits	**66**

Biomedical Sciences BS: Radiologic Technology Learning Outcomes

Students graduating from the Radiologic Technology program will:

- Be able to produce diagnostic radiographs.
- Be able to provide appropriate and compassionate patient care.
- Be able to integrate the principle of ALARA ("as low as reasonably achievable") into their practice, ensuring the highest standards of radiation safety.
- Be able to modify routine radiographic positioning by using critical thinking, problem-solving, and decision-making skills.
- Be able to determine the technical factors to be used in radiographic imaging.
- Be able to critique radiographic images.
- Demonstrate communication with patients in an age-appropriate, culturally diverse, and compassionate manner.
- Exhibit appropriate professional communication
- Possess an understanding of ethical standards in healthcare.
- Achieve scores higher than the national average on the American Registry of Radiologic Technologists (ARRT) National Registry Exam.

Honors in the Major

Honors in the major are granted to students who earn a GPA of 3.500 or above on a minimum of 30 completed credits at UWM.

College of Health Professions and Sciences Dean's Honor List

GPA of 3.500 or above, earned on a full-time student's GPA on 12 or more graded credits in a given semester.

Honors College Degree and Honors College Degree with Distinction

Granted to graduating seniors who complete Honors College requirements, as listed in the Honors College (https://catalog.uwm.edu/honors-college/) section of this site.

Commencement Honors

Students with a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester, will receive all-university commencement honors and be awarded the traditional gold cord at the December or May Honors Convocation. Please note that for honors calculation, the GPA is **not** rounded and is truncated at the third decimal (e.g., 3.499).

Final Honors

Earned on a minimum of 60 graded UWM credits: Cum Laude - 3.500 or above; Magna Cum Laude - 3.650 or above; Summa Cum Laude - 3.800 or above.