BIOMEDICAL SCIENCES, BS: RADILOGIC 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
- Cytootechnolgy
- 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.

Entry into professional training is competitive and dependent upon:

1. Completion of UWM's General Education Requirements (GER) (http://catalog.uwm.edu/policies/undergraduate-policies/#generaleducationtext);
2. 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.
3. 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;
4. 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;
5. Students are required to earn a grade of C or better in the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO SCI 202</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO SCI 203</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BMS 301</td>
<td>Human Pathophysiology: Fundamentals</td>
<td></td>
</tr>
<tr>
<td>BMS 302</td>
<td>Human Pathophysiology: Organ Systems I</td>
<td></td>
</tr>
<tr>
<td>BMS 303</td>
<td>Human Pathophysiology: Organ Systems II</td>
<td></td>
</tr>
<tr>
<td>BMS 304</td>
<td>Human Pathophysiology: Organ Systems III</td>
<td></td>
</tr>
<tr>
<td>BMS 305</td>
<td>Human Pathophysiology: Organ Systems IV</td>
<td></td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Chemical Science</td>
<td>4</td>
</tr>
<tr>
<td>DMI 300</td>
<td>Diagnostic Medical Imaging Fundamentals</td>
<td>2</td>
</tr>
</tbody>
</table>

6. 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
7. 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/).

Additional information is available from the Office of Student Affairs, (414) 229-2758.

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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Professional Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oral and Written Communication (OWC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competency Part A &amp; B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quantitative Literacy (QL) Competency Part A and B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign Language Competency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Natural Sciences</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Social Sciences</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Cultural Diversity</td>
<td>1</td>
</tr>
</tbody>
</table>
Major Requirements

BIO SCI 202 Anatomy and Physiology I 4
BIO SCI 203 Anatomy and Physiology II 4
BMS 205 Introduction to Diagnostic Medicine 3
BMS 245 Client Diversity in Health Sciences: An Interdisciplinary Perspective (SS/CD) 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 4
COMSDIS 250 Interprofessional Communication in the Health Sciences (SS) 3
COMMUN 103 Public Speaking (HU) 3
ENGLISH 207 Health Science Writing (OWCB) 3
HS 102 Healthcare Delivery in the United States 3
HS 222 Language of Medicine 3
HS 224 Computational Tools for Healthcare Professionals 3
KIN 270 Statistics in the Health Professions: Theory and Practice (QLB) 3
DMS 300 Diagnostic Medical Imaging Fundamentals 2

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.

Pre-Professional Training Requirements

Year 1

Fall Credits
BIO SCI 202 Anatomy and Physiology I * 4
BMS 205 Introduction to Diagnostic Medicine 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
HS 102 Healthcare Delivery in the United States 3
HS 222 Language of Medicine 3
KIN 270 Statistics in the Health Professions: Theory and Practice (QLB) 3

Credits 13

Year 2

Fall Credits
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
HS 224 Computational Tools for Healthcare Professionals 3
HS 251 Health Documentation 1
DMI 300 Diagnostic Medical Imaging Fundamentals * 2

Credits 12

Spring
BMS 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

Credits 12
<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>DMI 355</td>
<td>Radiography Clinical Education I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td>DMI 307</td>
<td>Seminar in Radiography I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DMI 308</td>
<td>Imaging Procedures II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>DMI 362</td>
<td>Principles of Imaging II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DMI 364</td>
<td>Radiography Clinical Education II</td>
<td>3</td>
</tr>
<tr>
<td>Summer</td>
<td>DMI 309</td>
<td>Imaging Procedures III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DMI 372</td>
<td>Radiographic Clinical Education III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>DMI 470</td>
<td>Radiographic Physics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DMI 473</td>
<td>Imaging Procedures IV</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DMI 480</td>
<td>Seminar in Radiography IV</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DMI 474</td>
<td>Radiography Clinical Education IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DMI 477</td>
<td>Cross Sectional Anatomy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td>DMI 360</td>
<td>Radiation Biology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DMI 401</td>
<td>Seminar in Radiography II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DMI 475</td>
<td>Seminar in Radiography III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DMI 478</td>
<td>Radiologic Pathology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DMI 479</td>
<td>Radiography Clinical Education V</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Summer</td>
<td>DMI 485</td>
<td>Professional Development in Radiography</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DMI 486</td>
<td>Radiography Clinical Education VI</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td></td>
<td>66</td>
</tr>
</tbody>
</table>

**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 following advancement to a Health Sciences major.

**Honors in the College of Health Sciences**

**Dean's Honor List**

GPA of 3.750 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 (http://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).