

University of Iowa Carver College of Medicine  
**Baccalaureate Degree in Radiation Sciences**  
[www.medicine.uiowa.edu/radsci](http://www.medicine.uiowa.edu/radsci) PH: 319-353-8388

**Admission Requirements: Diagnostic Medical Sonography (DMS)**

- Prerequisite Courses:
  - **Rhetoric:** RHET:1030 Rhetoric
  - **Natural Science:** *anatomy, one of these:*
    - HHP:1100 Human Anatomy
    - HHP:1150 Human Anatomy with Lab
    - HHP:3105 Anatomy for Human Physiology
    - HHP:3115 Anatomy for Human Physiology with Lab
    - ACB:3110 Principles of Human Anatomy
  - AND: *physiology, one of these:*
    - HHP:1300 Fundamentals of Human Physiology
    - HHP:1350 Fundamentals of Human Physiology with Lab
    - HHP:3500 Human Physiology
    - HHP:3550 Human Physiology with Lab
  - AND: *physics, one of these:*
    - PHYS:1400 Basic Physics
    - PHYS:1511 College Physics I
  - **Psychology:** PSY:1001 Elementary Psychology
  - **Quantitative/Formal Reasoning:** *one of these:*
    - MATH:1440 Math for the Biological Sciences
    - MATH:1020 Elementary Functions
  - **General Education:** *3sh from 2 of the following areas:*
    - Diversity and Inclusion (DI)
    - Historical Perspectives (HP)
    - International and Global Issues (IGI)
    - Literary, Visual, and Performing Arts (LVPA)
    - Values and Culture (VC)
  - **Medical Terminology:** CLSA:3750 Medical and Technical Terminology
- Prerequisites courses must be completed by June 1 with one exception: physics may be completed in the summer semester.
- 2.5 minimum cumulative college GPA is required.
- Two years of high school world language is a prerequisite to the professional program.
- International students and students whose first language is not English: must satisfy all UI Admissions requirements, complete the English Language Requirements for Admission, and have clearance to take a full academic load.
- Recommended:**
  - Job shadowing, patient care experience, and research of professional field(s)
  - RSP:1100 Introduction to Radiation Sciences
  - CS:1020 Principles of Computing or MSCI:1500 Business Computing Essentials
  - STAT:1020, 3510, or 4143 Statistics

Notes:

- Separate application for competitive selection to the professional track due *by January 15*
- Admission to a Radiation Sciences program is not guaranteed.
- Application and selection process is required due to limited clinical openings.
- Personal interview on campus for invited applicants
- Transfer students: Apply to the College of Liberal Arts & Sciences, Radiation Sciences Interest *by mid December*. Also see the Transfer Credits link on the Student Resources tab.

## Degree Requirements:

### 1) **One of the following professional Radiation Sciences tracks:**

- Diagnostic Medical Sonography and General and Vascular (3 year track) – 9 students
- Diagnostic Medical Sonography and Cardiac and Vascular (3 year track) – 6 students

### 2) **Semester hour and GPA Requirements:**

- Successfully complete a minimum of 120 semester hours of credit
- Maintain a minimum 2.0 cumulative and UI GPA
- Complete all track courses with a C or above

<b>FIRST YEAR - FRESHMAN</b>			
<b>1<sup>st</sup> Semester Fall</b>	<b>sh</b>	<b>2<sup>nd</sup> Semester Spring</b>	<b>sh</b>
RHET:1030 Rhetoric	4	Human Physiology	3-5
BIOL:1140 Human Biology* OR Human Anatomy	3-5	Human Anatomy (if not completed in fall) or Physics	3-5
MATH:1440 Math for Biological Sciences	4	PSY:1001 Elementary Psych	3
DI, IGI, HP, LVPA, or VC	3	CLSA:3750 Medical Terminology	2
RSP:1100 Introduction to Radiation Sciences**	1	DI, IGI, HP, LVPA, or VC	3
<b>Subtotal</b>	<b>15-17</b>	<b>Subtotal</b>	<b>14-18</b>

<b>3<sup>rd</sup> Semester Summer</b>	<b>sh</b>
PHYS:1400 Basic Physics ^	3
<b>Subtotal</b>	<b>3</b>
<b>Total Freshman</b>	<b>29-38</b>

\* Most students will need to complete Human Biology prior to Anatomy (based on academic strength)

\*\* Strongly recommended, not required

^ Physics for DMS program may be completed in the spring or summer semester. Summer is recommended if both Anatomy and Physiology are taken in the spring. Students interested in Radiation Therapy will take physics in their sophomore year.

- **Students are advised for success, based on academic strength, not necessarily for a 4 year plan.**
- **Prerequisites may take more than one year to complete.**

## Diagnostic Medical Sonography

### Both Tracks:

<b>SECOND YEAR - SOPHOMORE</b>			
<b>1<sup>st</sup> Semester Fall</b>	<b>sh</b>	<b>2<sup>nd</sup> Semester Spring</b>	<b>sh</b>
RSP:2110 Pathology for Radiation Sciences	2	RSP:3210 Medical Ethics & Law	2
RSP:2120 Patient Care for Radiation Sciences	3	RSCT:4100 Sect Anatomy for Imaging Sci (online)	3
STAT:1020 Elementary Stats and Inference*	(3)	RSCI:4130 ECG & Hemodynamics (online)	3
RSCI:4110 Vascular Anatomy (online)	3	RSMS:3110 Foundations of Sonography	3
CS:1020 Principles of Computing <u>or</u>	(3)	RSMS:3111 Foundations of Sonography Lab	1
MSCI:1500 Business Computing Essentials*	(2)	RSMS:3115 DMS Clinical Internship I	2
<b>Subtotal</b>	<b>8</b>	<b>Subtotal</b>	<b>14</b>
		<b>Total Sophomore</b>	<b>22</b>

**General & Vascular:**

<b>THIRD YEAR – JUNIOR GENERAL</b>			
<b>1<sup>st</sup> Semester Fall</b>	<b>sh</b>	<b>2<sup>nd</sup> Semester Spring</b>	<b>sh</b>
RSMS:3120 Abdominal Sonography I	3	RSMS:3230 Sonography Princ, Physics & Instr	3
RSMS:3121 Abdominal Sonography I Lab	1	RSMS:3231 Sonography Princ, Physics & Instr Lab	1
RSMS:3130 OB & Gyn Sonography I	3	RSMS:3240 Abdominal Sonography II	3
RSMS:3131 OB & Gyn Sonography I Lab	1	RSMS:3250 OB & Gyn Sonography II	3
RSMS:3140 Vascular Sonography I	3	RSMS:3270 Vascular Sonography II	3
RSMS:3141 Vascular Sonography I Lab	1	RSMS:3215 DMS Clinical Internship II	3
<b>Subtotal</b>	<b>12</b>	<b>Subtotal</b>	<b>16</b>
<b>3<sup>rd</sup> Semester Summer</b>			
RSMS:3325 Abdominal Sonography II Lab	1		
RSMS:3376 Vascular Sonography II Lab	1		
RSMS:3260 Breast Sonography* (online)	(2)		
RSMS:3300 Pediatric Sonography* (online)	(3)		
RSMS:3315 DMS Clinical Internship III	4		
<b>Subtotal</b>	<b>6</b>	<b>Total Junior</b>	<b>34</b>
<b>FOURTH YEAR – SENIOR GENERAL</b>			
<b>1<sup>st</sup> Semester Fall</b>	<b>sh</b>	<b>2<sup>nd</sup> Semester Spring</b>	<b>sh</b>
RSMS:4110 Advanced Sonography	3	RSP:3220 Rad Sci QM & Healthcare Admin (online)	2
RSMS:4111 Advanced Sonography Lab	1	RSMS:4220 Multidisciplinary Capstone Seminar	3
RSMS:4115 DMS Clinical Internship IV	5	RSMS:4215 DMS Clinical Internship V	5
RSP:4110 Research Methodologies for Rad Sci	3	Electives if needed	(0-11)
<b>Subtotal</b>	<b>12</b>	<b>Subtotal</b>	<b>10</b>
		<b>Total Senior</b>	<b>22</b>
<b>TOTAL DMS GEN/VASC</b>			<b>78sh</b>

**Cardiac & Vascular:**

<b>THIRD YEAR – JUNIOR CARDIAC</b>			
<b>1<sup>st</sup> Semester Fall</b>	<b>sh</b>	<b>2<sup>nd</sup> Semester Spring</b>	<b>sh</b>
RSMS:3100 Cardiac Sonography I	3	RSMS:3230 Sonography Princ, Physics & Instr	3
RSMS:3101 Cardiac Sonography I Lab	1	RSMS:3231 Sonography Princ, Physics & Instr Lab	1
RSMS:3150 Cardiac Physiology & Hemodynamics	3	RSMS:3205 Cardiac Sonography II	3
RSMS:3140 Vascular Sonography I	3	RSMS:3206 Cardiac Sonography II Lab	1
RSMS:3141 Vascular Sonography I Lab	1	RSMS:3270 Vascular Sonography II	3
Electives if needed	(0-3)	RSMS:3215 DMS Clinical Internship II	3
<b>Subtotal</b>	<b>11</b>	<b>Subtotal</b>	<b>14</b>
<b>3<sup>rd</sup> Semester Summer</b>			
RSMS:3376 Vascular Sonography II Lab	1		
RSMS:3315 DMS Clinical Internship III	4		
<b>Subtotal</b>	<b>5</b>	<b>Total Junior</b>	<b>30</b>
<b>FOURTH YEAR – SENIOR CARDIAC</b>			
<b>1<sup>st</sup> Semester Fall</b>	<b>sh</b>	<b>2<sup>nd</sup> Semester Spring</b>	<b>sh</b>
RSMS:4110 Advanced Sonography	3	RSP:3220 Rad Sci QM & Healthcare Admin (online)	2
RSMS:4111 Advanced Sonography Lab	1	RSMS:4220 Multidisciplinary Capstone Seminar	3
RSMS:4120 Advanced Cardiac Sonography	3	RSMS:4215 DMS Clinical Internship V	5
RSMS:4121 Advanced Cardiac Sonography Lab	1	Electives if needed	(0-8)
RSMS:4115 DMS Clinical Internship IV	5		
RSP:4110 Research Methodologies for Rad Sci	3		
<b>Subtotal</b>	<b>16</b>	<b>Subtotal</b>	<b>10</b>
		<b>Total Senior</b>	<b>26</b>
<b>TOTAL DMS CARD/VAS</b>			<b>78sh</b>

\*Elective