University of Iowa Carver College of Medicine

Baccalaureate Degree in Radiation Sciences

www.medicine.uiowa.edu/radsci PH: 319-353-8388

Admission Requirements: Radiation Therapy

- 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
  - **A total of 60sh of coursework**
- Prerequisites courses must be completed by June 1.
- 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
- CHEM:1070 General Chemistry I or CHEM:1110 Principles of Chemistry I
- CHEM:1080 General Chemistry II or CHEM:1120 Principles of Chemistry II
- PHYS:1512 College Physics II
- 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) **Complete the following professional Radiation Sciences track:**
   - Radiation Therapy (2 year track) – 7 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

FIRST YEAR - FRESHMAN			
1st Semester Fall	**sh**	**2nd Semester Spring**	**sh**
RHET:1030 Rhetoric	4	Human Physiology	3-5
BIOL:1140 Human Biology* OR Human Anatomy	3-5	Human Anatomy (if not completed in fall)	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
Subtotal	**15-17**	**Subtotal**	**14-18**
		Total Freshman	**29-35**

* Most students will need to complete Human Biology prior to Anatomy (based on academic strength)
** Strongly recommended, not required
^ Students may take physics in their sophomore year.

SECOND YEAR - SOPHOMORE			
1st Semester Fall	**sh**	**2nd Semester Spring**	**sh**
CHEM:1070 General Chemistry or CHEM: 1110 Principles of Chemistry*	3 4	CHEM:1080 General Chemistry II or CHEM:1120 Principles of Chemistry II*	3 4
PHYS:1400 Basic Physics or PHYS:1511 College Physics I	3-4	PHYS:1512 College Physics II*	4
CS:1020 Principles of Computing* or MSCI:1500 Business Computing Essentials*	3 2	STAT:1020, 3510, or 4143 Statistics*	4
Electives	4-7	Electives	3-4
Subtotal	**15**	**Subtotal**	**15**
		Total Sophomore	**30**
		Prerequisite Total:	**60 sh**

*Recommended, not required

Radiation Therapy

Students select one area of interest prior to the junior summer semester: MRI, CT, or CT/MRI Combo.

THIRD YEAR - JUNIOR			
1st Semester Fall	**sh**	**2nd Semester Spring**	**sh**
RSP:2120 Patient Care for Radiation Sciences	3	RSP:3210 Medical Ethics & Law	2
RSP:3130 Radiation Safety & Radiobiology	2	RSTH:3205 Principles of Radiation Therapy I	3
RSP:2110 Pathology for Radiation Sciences	2	RSTH:3215 Medical Physics II	2
RSTH:3110 Medical Physics I	2	RSTH:3225 Radiation Therapy Clinical Internship II	3
RSTH:3100 Introduction to Radiation Therapy	3	RSCT:4100 Sect Anatomy for Imaging Sci (online)	3
RSTH:3120 Radiation Therapy Clinical Internship I	3		
Subtotal	**15**	**Subtotal**	**13**
3rd Semester Summer	**sh**		
RSTH:3325 Radiation Therapy Clinical Internship III	4		
MRI or CT/MRI Combo:			
RSMR: 4110 Fundamentals MRI Tech (online)	3		
Subtotal	**4-7**	**Total Junior**	**32-35**

FOURTH YEAR - SENIOR			
1st Semester Fall	**sh**	**2nd Semester Spring**	**sh**
RSTH:4105 Principles of Radiation Therapy II	2	RSTH:4230 Radiation Therapy Capstone Seminar	3
RSTH:4125 Radiation Therapy Clinical Intern IV	4	RSTH:4225 Radiation Therapy Clinical Internship V	5
RSP:4110 Research Methodologies for Rad Sci	3	RSCT:4110 CT/MR Pathology (online)	3
CT:		RSP:3220 Rad Sci QM & Healthcare Admin (online)	2
RSCT:4120 CT Procedures I (online)	3		
RSCT:4130 CT Physical Principles & QC (online)	4		
MRI:			
RSMR:4140 MRI Acquisition & Principles I	3		
CT/MRI Combo:			
RSCT:4130 CT Physical Principles & QC (online)	4		
Subtotal	**12-16**	**Subtotal**	**13**
		Total Senior	**25-29**
		TOTAL THERAPY	**60-61sh**

Elective CT and MRI courses:

RSCI:4110 Vascular Anatomy (3sh online) Su/Fa/Spr
RSCI:4130 ECG & Hemodynamics (3sh online) Spr
RSMR:4120 MRI Procedures I (4sh online) Fa
RSMR:4130 MRI Procedures II (4sh online) Spr
RSMR:4150 MRI Acquisition & Princ. II (3sh online) Spr
RSCT:4125 CT Procedures II (3sh online) Sp