

# RADIOLOGIC AND IMAGING SCIENCES

## Bachelor of Science Degree in Radiologic and Imaging Sciences (CIP# 1105109112)

### Limited Access

#### School of Health Sciences

The Radiologic and Imaging Sciences Bachelor's degree offers graduates of Radiography, Sonography, Nuclear Medicine, or Radiation Therapy Associate degree programs who hold professional certification the opportunity to expand their knowledge in advanced modalities or quality management and administration. The Radiologic and Imaging professions are challenging and growing professions with career opportunities in areas such as computed tomography, magnetic resonance imaging, mammography, angiography, and quality assurance. With professional experience and additional education at the baccalaureate level, opportunities for management and education career options are enhanced. The Radiologic and Imaging Sciences program is accredited by the Joint Review Committee on Education in Radiologic Technology (J.R.C.E.R.T.).

With the exception of the Practicum course, the BSRAD program is an online program.

Since the BSRAD is a limited access program, admission to Valencia does not imply acceptance to the program.

### Program Concentrations

- Cardiac Ultrasound Concentration
- Computed Tomography (CT) Concentration
- Leadership Concentration
- Magnetic Resonance Imaging (MRI) Concentration
- Mammography Concentration
- Vascular Ultrasound Concentration

### Potential Careers

- Radiology Management/Administration
- Education
- Advanced Clinical Practice in:
  - Computed Tomography
  - Magnetic Resonance Imaging
  - Mammography

### Salary & Earnings Information

For salary and wage information, visit: [www.salary.com](https://www.salary.com) (<https://www.salary.com>)

### Contact Information

For more information about the program or admission requirements, please email [AlliedHealthBS.ATC@valenciacollege.edu](mailto:AlliedHealthBS.ATC@valenciacollege.edu).

For the most up-to-date information, visit <https://valenciacollege.edu/academics/programs/health-sciences/radiologic-imaging-sciences/>.

Your Student Success Coach contact information can be found in MyVC. Log into MyVC, click on the Courses tab, and check your Academic Profile information to find a link to your Coach.

## Overview of Radiologic and Imaging Sciences

For the Radiologic and Imaging Sciences program, students must hold current professional certification and a degree in an imaging field. Students must provide proof of current professional certification or its equivalent in their respective imaging discipline: from the American Registry of Radiologic Technologists (ARRT), American Registry of Diagnostic Medical Sonographers (ARDMS), or Nuclear Medicine Technology Certification Board (NMTCB).

Students must have a minimum of 68 accepted credits and one of the following degrees from a regionally accredited institution:

- Associate Degree in Diagnostic Medical Sonography
- Associate Degree in Nuclear Medicine Technology
- Associate Degree in Radiation Therapy
- Associate Degree in Radiography

*Students who hold the appropriate professional certification and an Associate degree or higher in any other field may also be considered for admission.*

For admission, the following prerequisite coursework must be completed with a minimum grade of C:

ENC 1101	FRESHMAN COMPOSITION I (GR) <sup>++~</sup>	3
MAC 1105	COLLEGE ALGEBRA (GR) <sup>++~</sup>	3
BSC 2093C	<sup>++~</sup>	4
	or BSC X085C	
BSC 2094C		4
	or BSC X086C	

In their junior and senior years, students will be required to complete the following coursework:

Any additional credits needed to complete the state-mandated 36 General Education credits in all five areas according to Valencia program requirements. If a student holds an Associate in Arts degree or higher from a regionally accredited institution, all General Education requirements will be satisfied <https://catalog.valenciacollege.edu/degrees/bachelorofscience/generaleducation/> (<http://catalog.valenciacollege.edu/degrees/bachelorofscience/generaleducation/>)

27 credits in upper-division core courses

15 credits in upper-division concentration area

Students are responsible for meeting the degree graduation requirements found under the *Program Requirements* tab located on this page.

## Admission Requirements

- Be a U.S. citizen or U.S. permanent resident or in a non-resident immigrant category other than F or J visa categories
- Be able to complete the clinical placement in the Valencia College service district (Orange and Osceola counties), or choose the Leadership Concentration or an advanced modality securing your own clinical experience

- Review the current BSRAD Program Guide and updates at <https://valenciacollege.edu/academics/programs/health-sciences/radiologic-imaging-sciences/index.php> (<https://valenciacollege.edu/academics/programs/health-sciences/radiologic-imaging-sciences/>)
- Submit a completed Valencia Application for Admission using the Bachelor's Degree & ATC application, and be in Active Student Status.
- Have a minimum overall college GPA of 2.5.
- Submit official transcripts from all prior colleges and universities with one denoting completion of an Associate degree or higher from a regionally accredited institution with a minimum of 68 accepted credits of course work, including the previously-specified General Education coursework. An applicant who holds a professional credential in the field and any associate degree or higher from a regionally accredited institution may substitute their professional credential in lieu of having the degree in an eligible field. Documentation will be required.
- Following your admission to Valencia College as a candidate for the Bachelor of Science, complete the online Bachelor's Degree Orientation and submit a copy of your current certification with ARRT, ARDMS, NMTCB, or equivalent certification to AlliedHealthBS.ATC@valenciacollege.edu.

**Note:** Prior to enrollment in a clinical practicum, provide documentation of the following requirements:

- Current criminal background check
- Fingerprinting
- Drug testing
- Physical exam forms
- Up-to-date immunization data

## Program Outcomes

- Perform effective communication skills within the healthcare environment.
- Practice professional behaviors in the healthcare setting.
- Perform entry level skills as described by the scope of practice for selected clinical concentration.
- Execute safe clinical decision making in healthcare environment.
- Demonstrate information literacy.

## Degree Requirements

Students who did not have a Humanities and/or Social Science course prior to program admission must have at least 6 credits in both areas for degree graduation.

<b>Communication</b>		<b>6</b>
ENC 1102	FRESHMAN COMPOSITION II <sup>++~</sup>	
SPC 1608 or SPC 1017	FUNDAMENTALS OF SPEECH ~ INTERPERSONAL COMMUNICATION	
<b>Mathematics</b>	<b>STA 2023 is recommended <sup>++~</sup></b>	<b>3</b>
<b>General Education</b>	<b>See Gen. Ed. Requirements ~</b>	<b>9</b>
<b>Student Choice</b>		
<b>Radiological and Imaging Core Requirements</b>		<b>21</b>
RTE 3213	RADIOLOGY INFORMATION SYSTEMS <sup>++</sup>	
HSA 3702	RESEARCH METHODS AND INFORMATION LITERACY <sup>++</sup>	
RTE 4574	ADVANCED IMAGING MODALITIES <sup>++</sup>	

HSC 4555	PATHOPHYSIOLOGIC MECHANISMS <sup>++</sup>	
HSC 4640	INTRODUCTION TO HEALTH LAW <sup>++</sup>	
HSC 4652	ETHICS AND HEALTH CARE IN A PLURALISTIC SOCIETY <sup>++</sup>	
HSA 4184	LEADERSHIP IN HEALTHCARE <sup>++</sup>	
Electives (2): Radiologic and Imaging Sciences Electives <sup>+</sup>		<b>6</b>
<b>Concentration (See below)</b>		<b>15</b>
<b>Total Credit Hours</b>		<b>60</b>

## Concentration: Magnetic Resonance Imaging

RTE 3116	ADVANCED PATIENT CARE <sup>++</sup>	<b>3</b>
RTE 3765	ANATOMY FOR THE MEDICAL IMAGER <sup>++</sup>	<b>3</b>
RTE 3591	MRI PRINCIPLES AND INSTRUMENTATION <sup>++</sup>	<b>3</b>
RTE 3592	MR IMAGING AND PROCEDURES <sup>++</sup>	<b>3</b>
RTE 4943L	MRI PRACTICUM <sup>++</sup>	<b>3</b>
<b>Total Credit Hours</b>		<b>15</b>

## Concentration: Computed Tomography

(For Radiographers, Radiation Therapists, and Nuclear Medicine Technologists only)

RTE 3116	ADVANCED PATIENT CARE <sup>++</sup>	<b>3</b>
RTE 3765	ANATOMY FOR THE MEDICAL IMAGER <sup>++</sup>	<b>3</b>
RTE 3590	COMPUTED TOMOGRAPHY <sup>++</sup>	<b>3</b>
RTE 4474	QUALITY MANAGEMENT <sup>++</sup>	<b>3</b>
RTE 4942L	CT PRACTICUM <sup>++</sup>	<b>3</b>
<b>Total Credit Hours</b>		<b>15</b>

## Concentration: Mammography

(For Radiographers only)

RTE 3116	ADVANCED PATIENT CARE <sup>++</sup>	<b>3</b>
RTE 3765	ANATOMY FOR THE MEDICAL IMAGER <sup>++</sup>	<b>3</b>
RTE 3588	MAMMOGRAPHY <sup>++</sup>	<b>3</b>
RTE 4474	QUALITY MANAGEMENT <sup>++</sup>	<b>3</b>
RTE 4941L	MAMMOGRAPHY PRACTICUM <sup>++</sup>	<b>3</b>
<b>Total Credit Hours</b>		<b>15</b>

## Concentration: Cardiac Ultrasound

(For Radiographers and Sonographers only)

RET 4440C	CARDIAC ULTRASOUND I <sup>++</sup>	<b>3</b>
RET 4443	CARDIAC ULTRASOUND PHYSICS <sup>++</sup>	<b>2</b>
RET 4942L	CARDIAC ULTRASOUND CLINICAL PRACTICE I <sup>++</sup>	<b>2</b>
RET 4441C	CARDIAC ULTRASOUND II <sup>++</sup>	<b>3</b>
RET 4943L	CARDIAC ULTRASOUND CLINICAL PRACTICE II <sup>++</sup>	<b>2</b>

RTE 3116	ADVANCED PATIENT CARE <sup>++</sup>	3
<b>Total Credit Hours</b>		<b>15</b>

## Concentration: Vascular Ultrasound

(For Sonographers only)

SON 3172C	INTRODUCTION TO VASCULAR SONOGRAPHY	3
SON 3173	VASCULAR SONOGRAPHY II	3
SON 3806L	VASCULAR SONOGRAPHY PRACTICUM I	2
SON 4174	VASCULAR SONOGRAPHY III	2
SON 4816L	VASCULAR SONOGRAPHY PRACTICUM II	2
Electives	Radiologic and Imaging Sciences Electives <sup>++</sup>	3
<b>Total Credit Hours</b>		<b>15</b>

## Concentration (non-clinical): Leadership

RTE 3205	ADMINISTRATION AND SUPERVISION <sup>++</sup>	3
RTE 4474	QUALITY MANAGEMENT <sup>++</sup>	3
HSA 4340	PRINCIPLES OF HUMAN RESOURCES MANAGEMENT <sup>++</sup>	3
HSA 4110	ORGANIZATIONAL BEHAVIOR <sup>++</sup>	3
HSA 4502	HEALTH CARE RISK MANAGEMENT <sup>++</sup>	3
<b>Total Credit Hours</b>		<b>15</b>

### Radiologic and Imaging Sciences Electives

RTE 3253	TEACHING IN THE HEALTH PROFESSION <sup>++</sup>	3
HSA 4340	PRINCIPLES OF HUMAN RESOURCES MANAGEMENT <sup>++</sup>	3
RTE 3205	ADMINISTRATION AND SUPERVISION <sup>++</sup>	3
RTE 4474	QUALITY MANAGEMENT <sup>++</sup>	3
RTE 3590	COMPUTED TOMOGRAPHY <sup>++</sup>	3
RTE 3591	MRI PRINCIPLES AND INSTRUMENTATION <sup>++</sup>	3
RTE 3593C	ADVANCED MRI PROCEDURES (+*)	3
RTE 3588	MAMMOGRAPHY <sup>++</sup>	3
RTE 3116	ADVANCED PATIENT CARE <sup>++</sup>	3
RTE 3765	ANATOMY FOR THE MEDICAL IMAGER <sup>++</sup>	3
HSA 4110	ORGANIZATIONAL BEHAVIOR <sup>++</sup>	3
HSA 4341	CONFLICT MANAGEMENT IN HEALTH CARE <sup>++</sup>	3
HSC 4500	EPIDEMIOLOGY <sup>++</sup>	3
RET 4034	HEALTH CARE DELIVERY AND ACCESS <sup>++</sup>	3
RET 4440C	CARDIAC ULTRASOUND I <sup>++</sup>	3
RET 4441C	CARDIAC ULTRASOUND II <sup>++</sup>	3
HSA 4502	HEALTH CARE RISK MANAGEMENT <sup>++</sup>	3

+ This course must be completed with a grade of C or better.

\* This course has a prerequisite; check description in Valencia catalog.

(GB) notes a Gordon Rule course.

### Note:

Specialized courses may not be offered every session.

Prior to beginning the practicum/clinical, students must provide the following documentation:

- Current criminal background check and fingerprinting
- Drug screening
- Physical exam form
- Record with up-to-date immunization data

### Transfer Notes:

- Students who hold an A.A. or Bachelor's degree from a regionally accredited institution have satisfied Valencia's general education program requirements.
- Students transferring from a regionally accredited institution with the general education program (GEP) requirements of that institution met have thereby satisfied Valencia GEP requirements.

### Registration Note:

Once a student has been approved as "Course Registration Eligible," it is the student's responsibility to secure enrollment in the desired course(s).