

Radiologic Sciences (BS)

Degree Requirements

General Education Requirements (56-63 Hours)

Area I - Written Composition (2 Courses, 6 Hours)

- A. 3 hours: EH 101
- B. 3 hours: EH 102

Area II - Humanities & Fine Arts (4 Courses, 12 Hours)

- A. 3 hours: CA 110
- B. 3 hours from: EH 215, EH 216, EH 225, EH 226, EH 235, EH 236
- C. 3 hours from: ARH 100, ARH 103, ARH 123, ARS 101, DRA 110, MUL 101
- D. 3 hours from: AFR 101, ARH 100, ARH 103, ARH 123, ARH 203, ARS 101, CLA 110, DRA 110, EH 215, EH 216, EH 225, EH 226, EH 235, EH 236, LG 101, LG 102, LG 111, LG 112, LG 121, LG 122, LG 131, LG 132, LG 141, LG 142, LG 151, LG 152, LG 153, LG 171, LG 172, LG 173, LG 201, LG 202, LG 211, LG 212, LG 213, LG 221, LG 222, LG 231, LG 232, LG 234, LG 241, LG 242, 251, LG 252, LG 271, LG 272, LG 273, LGS 101, LGS 102, LGS 106, LGS 107, LGS 110, LGS 111, LGS 131, LGS 141, LGS 142, LGS 161, LGS 162, LGS 171, LGS 172, LGS 181, LGS 182, LGS 201, LGS 202, LGS 206, LGS 207, LGS 210, LGS 211, LGS 241, LGS 242, LGS 261, LGS 262, LGS 281, LGS 282, MUL 101, PHL 110, PHL 120, PHL 121, PHL 131, PHL 231, PHL 240, REL 100, REL 200, REL 201

Area III – Natural Sciences & Mathematics (3 Courses & Labs, 11-12 Hours)

- A. 3-4 hours from: MA 112, MA 113, MA 115, MA 120, MA 125, MA 126, MA 227, MA 237, MA 238
- B. 4 hours from: BLY 101 & BLY 101L or BLY 121 & BLY 121L
- C. 4 hours from: BLY 102 & BLY 102L or BLY 122 & BLY 122L, CH 101 & CH 101L, CH 103 & CH 103L, CH 131 & CH 131L, CH 132 & CH 132L

Area IV – History, Social & Behavioral Sciences (4 Courses, 12 Hours)

- A. 3 hours: PSY 120
- B. 3 hours from: HY 101, HY 102, HY 135, HY 136
- C. 6 hours from: AN 100, AN 101, CA 100, CA 211, ECO 215, ECO 216, GEO 114, GEO 115, GS 101, HY 101, HY 102, HY 135, HY 136, IS 100, IST 201, NAS 101, PSC 130, PSY 250, SY 109, SY 112

Area V - Pre-Professional Required Courses (15-22 Hours)

- A. 8 hours: BMD 251, BMD 252
- B. 3 hours: CIS 010, CIS 150
- C. 4-5 hours from: PH 104, PH 104L, PH 114, PH 114L
- D. 3 hours from: BUS 245, ST 210, ST 305

Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136)

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

Major Requirements (38 Hours)

Radiologic Science -First Year Professional Component (13 Courses, 38 Hours)

- A. Fall- 15 hours: RAD 300, RAD 304, RAD 307, RAD 310, RAD 312
- B. Spring- 15 hours: RAD 301, RAD 308, RAD 315, RAD 318, RAD 335

C. Summer- 8 hours: RAD 302, RAD 309, RAD 320

Radiologic Sciences -Second Year Professional Component (39 Hours)

Track 1: General Radiography To Include One Advanced Modality *. (Study Of Ultrasound Or Radiation Therapy Is Not An Option In The General Radiography Track) (30-44 Hours).

A. Fall - 12hours: RAD 403, RAD 411, RAD 415

Plus hours from one of the modalities:

- a. Mammography 4 hours from: RAD 480 & RAD 475 or RAD 476
- b. Computed Tomography 4 hours from: RAD 477 & RAD 475 or RAD 476
- c. Magnetic Resonance Imaging 4 hours from: RAD 483 & RAD 475 or RAD 476
- d. Vascular Radiography 4 hours from: RAD 486 & RAD 475 or RAD 476
- e. Radiology Administration 6 hours: RAD 430 & RAD 432

B. Spring - 8 hours: RAD 404, RAD 437, RAD 496

Plus hours from one of the modalities:

- a. Mammography 4 hours from: RAD 481 & RAD 475 or RAD 476
- b. Computer Tomography 4 hours from RAD 478 & RAD 475 or RAD 476
- c. Magnetic Resonance Imaging 4 hours from RAD 484 & RAD 475 or RAD 476
- d. Vascular Radiography 4 hours from RAD 487 & RAD 475 or RAD 476
- e. Radiology Administration 6 hours: RAD 433 & RAD 435

C. Summer - 7 hours: RAD 405, RAD 494, RAD 497

Plus hours from one of the modalities:

- a. Mammography 4 hours from: RAD 482 & RAD 475 or RAD 476
- b. Computer Tomography 4 hours from RAD 479 & RAD 475 or RAD 476
- c. Magnetic Resonance Imaging 4 hours from RAD 485 & RAD 475 or RAD 476
- d. Vascular Radiography 4 hours from RAD 481 & RAD 475 or RAD 476
- e. Radiology Administration 1 hour: RAD 440

Track 2: Ultrasound Only (30-36 Hours)

A. Fall - 9-17 hours: RAD 417, RAD 421, RAD 423, RAD 411**

B. Spring - 9 hours: RAD 418, RAD 424, RAD 496

C. Summer - 9-11 hours: RAD 320**, RAD 425, RAD 427, RAD 497

Track 3: Radiation Therapy Only (42-44 Hours)

A. Fall 15 - hours: RAD 441, RAD 448, RAD 446, RAD 450, RAD 452

B. Spring - 16 hours: RAD 442, RAD 455, RAD 453, RAD 458, RAD 496

C. Summer - 11-13 hours: RAD 443, RAD 456, RAD 454, RAD 497, RAD 320**

** RAD 320 and RAD 411 required if not previously completed

* Students who choose to complete Track 1 (Radiography to include one advanced modality) will be eligible to apply for continuation in the program to study any additional modality to include ultrasound and radiation therapy in a non-degree seeking student status. Please note that non-degree seeking students are not eligible for federal financial aid.

Minor Requirements (0 Hours)

A minor is not required for this degree program

Notes:

* Recommended Course

Additional Information

Graduation Plan

Multiple Degree Plans Available. Select To View Option:

- [Jump to Radiologic Sciences \(BS\):](#)
- [Jump to Mammography, MRI, IR, CT](#)
- [Jump to Radiology Administration](#)
- [Jump to Ultrasound](#)
- [Jump to Radiation Therapy](#)

Radiologic Sciences (BS): (126-153 Total Hours)

***The total number of hours for the RAD degree depends on which Track is chosen by the student.

First Pre-Professional Year - Fall

Course ID	Course Description	Hours
EH 101	English Composition I	3
Biology	**Area III, B	4
PSY 120	Introduction to Psychology (**Area IV, B)	3
Social Science	**Area IV, C	3
Total Hours		13

First Pre-Professional Year - Spring

Course ID	Course Description	Hours
EH 102	English Composition II	3
Biology	**Area III, C	4
MA 112	Precalculus Algebra	3
CA 110	Public Speaking	3
History	**Area IV, B	3
Total Hours		16

RAD 308	Osseous II	4
RAD 315	Contrast Media	2
RAD 318	X-Ray Physics	4
RAD 335	Pediatrics & Geriatrics	1
Total Hours		15

First Professional Year - Summer

Course ID	Course Description	Hours
RAD 302	Clinical Education III	3
RAD 320	Cross-Sectional Anatomy	2
RAD 415	Diagnostic Imaging	2
Total Hours		7

At the end of the first professional year, students will be asked to make a choice on how they wish to complete the degree.

There are three tracks from which to choose to complete the second professional year.

- Track 1 – General Radiography plus one advanced imaging modality (Vascular Imaging, CT, MRI, Mammography)
- Track 2 – Ultrasound only
- Track 3 – Radiation Therapy only

In addition to one of the modalities in Track 1, students may choose to add studies in Radiology Administration.

Students may also choose to complete the second professional year as described for Track 1, and then later apply for admission to any advanced modality including Ultrasound or Radiation Therapy. Please note that students with bachelor's degrees in Radiologic Sciences do not currently qualify for federal financial aid benefits when pursuing additional certifications such as Radiation Therapy.

Bridge Program Students

Registered Radiographers wishing to complete a bachelor's degree in Radiologic Sciences are responsible for completing all requirements from the first and second year of the pre-professional component of the program prior to enrolling in the professional component of the Radiologic Sciences program. Upon successful completion of the bridge course, the Radiologic Sciences advisor will request for 38 hours of alternative credit (i.e. credit from the first professional year of the Radiologic Sciences program) to be added to the students' Degree Audit. Bridge student will choose either TWO advanced imaging specialties from the Second Professional Year Track I, ONE advanced imaging specialty and Radiologic Administration from the Second Professional Year Track I, the Second Professional Year for Ultrasound---Track II only, or the Second Professional Year for Radiation Therapy---Track III only. Bridge program students complete the program in 4 semesters (includes 2 summer terms). Students participating in the bridge program may have RAD 411 waived after successfully completing RAD 491 if the student will otherwise meet the upper-division residency requirement.

Bridge Students Only

First Semester - Summer 1

Course ID	Course Description	Hours
RAD 491	Professional Radiologic Practice	6

Total Hours	6
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Second Professional Year - Fall

Course ID	Course Description	Hours
Track 1	**General Radiography, A and one modality, a-e	16
*Track 1 + Rad Admin	**General Radiography, A, and one modality, a-d, and e	22
Track 2	**Ultrasound Only, A	9-13
Track 3	**Radiation Therapy Only, A	15
Bridge Students	**Two modalities from a-e, or Ultrasound Only, or Radiation Therapy Only	8-15
	Total Hours	8-22

*will need Dean's approval for over-the-credit-hour limit override

Second Professional Year - Spring

Course ID	Course Description	Hours
Track 1	**General Radiography, A and one modality, a-e	12
Track 1 + Rad Admin	**General Radiography, A, and one modality a-d, and e	18
Track 2	**Ultrasound Only, A	12
Track 3	**Radiation Therapy Only, A	16
Bridge Students	**RAD 496 and TWO modalities from a-e, or Ultrasound Only, or Radiation Therapy Only	8-16
	Total Hours	8-18

Second Professional Year - Summer

Course ID	Course Description	Hours
Track 1	**General Radiography, A and one modality, a-e	8-11
Track 1 + Rad Admin	**General Radiography, A, and one modality a-d, and e	12
Track 2	**Ultrasound Only, A	9-11
Track 3	**Radiation Therapy Only, A	11-13
Bridge Students	**RAD 497 and TWO modalities from a-e, or Ultrasound Only, or Radiation Therapy Only	6-13
	Total Hours	6-13

Notes

**See Degree Requirements

***The total number of hours to complete the RAD degree is based on which Track is chosen by the student.

Total Hours	10
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Department Information

Department of Radiologic Sciences Administrative Staff		(251) 445-9346
Chair	Dale Smith	
Medical Advisor	Maria S. Figarola M.D.	
Associate Professor		
Instructors	Cleveland, Cooper, Curtis, Jalkh, Manning, Pohlmann, Smith	
Teaching Technologists	Davis, Blow	

Department of Radiologic Sciences website
<http://www.southalabama.edu/alliedhealth/radiologicsscience>

Programs Offered:

Bachelor Of Science In Radiologic Sciences

Since its inception in 1976, the Department of Radiologic Sciences has provided a quality educational program with a sustained emphasis upon graduating competent and compassionate healthcare professionals. In so doing, our graduates are prepared to practice their profession in the often complex and global society of the 21st century.

The baccalaureate program is designed to provide graduates with enhanced career opportunities in radiology as administrators, educators, and advanced imaging specialists. The curriculum provides a broad education in liberal arts and basic sciences and an in-depth study in radiologic sciences.

Educational opportunities in diagnostic imaging and advanced imaging modalities such as mammography, magnetic resonance imaging, vascular radiography, computed tomography, radiology administration, ultrasound, and radiation therapy are offered. Following completion of the pre-professional component and admission to the professional component of the program, students will study general radiography for three semesters. At the end of this first year in the professional component, students will select one of the following tracks to complete: general radiography to include one advanced imaging modality, radiology administration, ultrasound, or radiation therapy.

The general radiography track curriculum includes diagnostic radiology and either mammography, computed tomography, magnetic resonance imaging, vascular radiography, and/or radiology administration. Students completing didactic and clinical requirements in these tracks will be eligible to seek certification through the American Registry of Radiologic Technologists (ARRT) in radiography and the advanced modality studied (excluding radiology administration).

The other two baccalaureate tracks allow students completing the first year of general radiography curriculum to select either ultrasound or radiation therapy during their second year. Those who choose one of these tracks will not be eligible to seek ARRT certification in radiography, but will be eligible for ARRT certification in radiation therapy or ARRT and American Registry

of Diagnostic Medical Sonographers (ARDMS) certification as an ultrasonographer upon completion of didactic and clinical requirements.

Certificates:

The certificate program in Radiology Administration would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and practical experience in radiology administration. This will prepare the student to sit for the certified radiology administrator (CRA) examination given by the Association for Medical Imaging Management (AHRA). This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of thirteen semester hours. The courses offered will include instruction in human resource management, asset resource management, fiscal management, operations management and communication and information management.

Radiation Therapy

The certificate program in radiation therapy would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) and who has a baccalaureate degree or is seeking a baccalaureate degree to receive didactic instruction and clinical experience in radiation therapy. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre- baccalaureate or a post-baccalaureate option for a student.

The program will be three semesters in length and consist of 44 semester hours. The courses offered will include instruction in patient care, treatment, dosimetry, simulations, and procedures performed by the radiation therapist.

Ultrasound

The certificate program in ultrasonography (US) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in US. This will prepare the student to sit for the certification examination given by the American Registry for Diagnostic Medical Sonography (ARDMS). This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of 34 semester hours. The courses offered will include instruction in patient care, image production, and procedures performed by the ultrasound technologist.

Magnetic Resonance Imaging

The certificate program in magnetic resonance imaging (MRI) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in MRI. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of twelve semester hours. The courses offered will include instruction in patient care, image production, and procedures performed by the MRI technologist.

Computed Tomography

The certificate program in computed tomography (CT) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in CT. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of twelve semester hours. The courses offered will include instruction in patient care, safety, image production, and procedures performed by the CT technologist.

Interventional Radiography

The certificate program in Interventional Radiography (IR) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in cardiac and vascular interventional radiography. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post- baccalaureate option for a student. The program will be three semesters in length and consist of twelve semester hours. The courses offered will include instruction in patient care, image production, and procedures performed by the interventional and cardiac radiography technologist.

Mammography

The certificate program in mammography would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in mammography. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of twelve

semester hours. The courses offered will include instruction in patient care, image production, and procedures performed by the mammography technologist.

*NOTE: Federal financial aid is not available at this time for these certificate programs for non-degree seeking students.

Pre-professional Component

Degree seeking students must complete the 56-63 semester hour pre-professional component prior to enrolling in professional component courses.

Professional Component

The professional component (Typically, students' junior and senior years) consists of two years of academic and clinical study in Radiologic Sciences. The program is six semesters in length, including two summer terms. All candidates must have satisfied the pre-professional component to qualify for the degree-seeking professional component, but completion of that component does not guarantee admission to the professional component. Enrollment in the professional component is limited by the number of clinical positions available, which is equally true for the advanced modalities. During the professional component, students must be prepared to travel up to 90 miles from campus in order to participate in the clinical education component of the curriculum.

Program Accreditation

The radiography and radiation therapy programs are accredited by the Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 2850, Chicago, Illinois, 60706-3182. For more information go to www.jrcert.org.

Admission Requirements For The Bachelor Of Science In Radiologic Sciences Program

1. Completion of all required pre-professional courses by the end of the summer semester prior to desired admission for Fall semester. Students are admitted to the professional component in the Fall semester only.
2. Completion of a Department of Radiologic Sciences application, available at <http://www.southalabama.edu/colleges/alliedhealth/radiologicsscience>.
3. Acceptance to the University of South Alabama.
4. Submit official college transcripts for all coursework not completed at the University of South Alabama. Transcripts are not required if the coursework has already been transferred to USA.
5. Application deadline is May 1.
6. Submit official ACT or SAT scores, regardless of previous educational background. If individual scores for Math, English and Natural Sciences on the ACT are below 18, it is strongly advised that the test be retaken. ACT or SAT scores must be submitted by the application deadline of May 1.
7. Submission of three (3) completed personal reference forms by the application deadline. Reference forms are available at <http://www.southalabama.edu/colleges/alliedhealth/radiologicsscience>.
8. Have a minimum cumulative overall (USA and transfer) GPA of 2.0 ("C" average) on previously completed college-level courses, as well as at least a "C" in all math and Sciences courses. Transcripts must be submitted by the application deadline.
9. Students applying for admission to the professional component must complete four (4) hours of observation in a hospital Radiology department prior to reporting for the admission interview. Following submission of the departmental application, applicants may call the Department of Radiologic Sciences at (251) 445-9346 any time after February 1st during the year in which they plan to apply, and schedule a hospital observation appointment. Observation form and instructions are available at <http://www.southalabama.edu/colleges/alliedhealth/radiologicsscience>.
10. Meet program technical/core performance standards. Core performance standards are fundamental tasks and skills that are required for successful completion of the program. They have been outlined and are available upon request and on the department website under Frequently Asked Questions (FAQ).
11. Complete a brief writing assignment conducted on the day of interview.
12. Complete a personal interview with members of the Radiologic Sciences Admissions Committee.
13. Applicants will be screened on the basis of past educational performance and the potential for the number of openings available. Therefore, acceptance into the University does not guarantee admission into the program. Likewise, admission into the program does not guarantee a position in a particular track/modality for one's senior year.
14. Student acceptance into the program is provisional pending completion of a drug screen and background check requirements as specified in the acceptance letter. Refusal to submit will result in nullification of acceptance into the program.

15. Proof of medical insurance must be provided and maintained throughout the program following official notification of acceptance into the program. Due date will be specified in the acceptance letter.
16. ARRT certified radiographers who have completed the pre-professional component and are seeking the baccalaureate degree may apply for admission into the second year (senior year) of the professional component.
17. International students must score a minimum of 76 on the TOEFL exam to include the following minimum sub-scores on the IBT:
Listening 20 Speaking 20 Reading 18 Writing 18

The IELTS exam will not be used as an admission requirement to the Radiologic Sciences Program

Special Fees

- Books: Approximately \$700-800
- Uniforms: Approximately \$250
- Clinical Data System: One-time payment of \$150
- Drug Screen: Approximately \$25
- Background Check: Varies based on number of prior residences, but approximately \$50
- Personal Medical Insurance: Must possess throughout program