### **CSUN**

# Department of Health Sciences

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## Radiologic Sciences Undergraduate Degree Program

#### CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

California State University, Northridge (CSUN) is one of 23 campuses of the California State University System, and is one of the largest universities in California. The student enrollment of approximately 42,000 is served by approximately 6,400 faculty and staff.

The University is accredited by the Western Association of Schools and Colleges (WASC), and by other professional associations. Radiologic Sciences is a program within California State University, Northridge's Health Sciences Department. The Radiologic Science Program has received the maximum accreditation (8 years) by the Joint Review Committee of Education in Radiologic Technology – November, 2010. Accreditation information can be found at <a href="https://www.JRCERT.org">www.JRCERT.org</a>. The BSRS Program is also approved by the <a href="mailto:California">California</a> <a href="mailto:Department">Department</a> of <a href="mailto:Public Health">Public Health</a>.

#### **PROGRAM INFORMATION**

The Radiologic Sciences B.S. degree program prepares radiographers (Radiologic Technologists) to work with patients and physicians, performing a wide variety of diagnostic imaging procedures within the radiology (x-ray) department. Radiologic Technologists must know the principles of anatomy, physiology, pathology, radiographic imaging, radiation safety, the operation of many types of x-ray and computerized equipment, the professional care and handling of patients, and the management of a radiology department or division. The baccalaureate program provides a multicomponent radiographer for the diagnostic team. Program competencies include experiences with standard x-ray equipment, angiographic suites, computerized tomography (CT or CAT scan), magnetic resonance (MR), digital and computer radiography (DR, CR) systems, digital vascular imaging devices, and mammography.

The Radiologic Sciences program consists of 2 phases, the pre-professional and the professional phase. During the pre-professional portion, students complete the General Education requirements and the Radiologic Sciences prerequisites. Upon successful completion of the pre-professional phase, students become eligible to apply to the professional Radiologic Sciences program which includes over 2,600 hours of clinical internship at affiliate Medical Centers. A limited number of clinical positions at these medical centers are available each year for students accepted into the professional phase. A separate application to the R.S. Program Selection Committee for clinical internship placement is due each January in the CSUN Health Sciences Department. Prior to submitting an application, hospital tours of clinical facilities must be completed, as well as advisement. Advisement appointments can be made through the Health Sciences Department prior to submitting an application. See the Department for application and information regarding selection criteria for the professional phase of the program. Please note that meeting prerequisite criteria DOES NOT guarantee placement into the professional Radiologic Sciences program.

If selected to the professional Radiologic Sciences program, prior to clinical placements, all CSUN radiologic sciences students are required to obtain their own criminal background checks at their sole cost and to supply that information to designated approving agencies or persons. In order to meet accreditation standards many clinical agencies are requiring background checks and drug testing on all students placed at their facilities and have the right to refuse a student clinical placement based upon information on background checks and drug testing. Students will be unable to complete degree requirements if clinical placements are refused. Further information on background checks and where to obtain them is available from radiologic sciences advisors.

Professional RS students are responsible for obtaining, at their sole cost, 3. Professional Courses cont. any necessary health exams, drug tests, immunizations, evidence of a TB test, titers, or other requirements necessary to meet OSHA requirements, and maintain compliance with requirements by the University and affiliating clinical agencies. Documentation of the requirements is to be submitted to the designated person, upon request. Before the first clinical course, each student is required to complete a pre-clinical checklist and provide proof that requirements are currently met. Access to reliable transportation is required for clinical courses off campus.

#### STUDENT LEARNING OUTCOMES OF THE RADIOLOGIC SCIENCES B.S. DEGREE

Graduates of the Radiological Science Program at California State University, Northridge will:

- 1. Demonstrate a mastery of basic radiographic imaging skills and advanced medical imaging skills in MRI, CT, and Interventional Radi-
- Demonstrate effective communication skills that provide compassioniate and age appropriate patient care.
- Demonstrate problem solving/critical thinking skills that provide ethical and safe patient care.
- Demonstrate the value of professional development to patient care and medical imaging through life-long learning and meet the needs of the medical imagining community.
- Maintain program effectiveness through continual assessment

#### 1. Lower Division Required Courses (31 units)

BIOL	101/L	General Biology and Lab*	4
BIOL	211	Human Anatomy	2
BIOL	212	Lab Studies in Human Anatomy	1
BIOL	281	Human Physiology	3
CHEM	100	Principles of Chemistry	3
PSY	150	Principles of Human Behavior*	3
SOC	150	Introductory Sociology*	3
PHY	100A	General Physics I*	3
PHY	100B/L	General Physics II and Lab*	4
MATH	105	Pre-Calculus**	5

<sup>\*</sup>Overlap with lower division General Education requirements.

#### 2. Clinical Courses (19 units)

HSCI	280	Radiologic Sciences: Clinical Education I	2
HSCI	281	Radiologic Sciences: Clinical Education II	2
HSCI	282	Radiologic Sciences: Clinical Education III	3
HSCI	283	Radiologic Sciences: Clinical Education IV	3
HSCI	284	Radiologic Sciences: Clinical Education V	3
HSCI	386	Radiologic Sciences: Clinical Education VI	3
HSCI	387	Radiologic Sciences: Clinical Education VII	3

#### 3. Professional Courses (41 units)

PHYS	376	Radiologic Physics	3
HSCI	181	Medical Imaging Sciences I	3
HSCI	182	Medical Imaging Sciences II	3
HSCI	285	Radiographic Anatomy & Positioning I	4
HSCI	286	Radiographic Anatomy & Positioning II	4
HSCI	302	Pathophysiology	3
HSCI	380	Cross-sectional Anatomy for Radiographers	2
HSCI	385	Quality Assurance & Evaluation of Radiologic Imaging Equipment	2
HSCI	480	Computerized Tomography	2

HSCI	482	Angiography and Interventional Procedures	3
HSCI	483A	Medical Imaging Pathology	2
HSCI	485	Principles of MRI	3
HSCI	486A/B	Seminar; Advances in Radiological Imaging I/II	1/1
HSCI	487	Professional Development for Radiographers	3

General Education: Eighteen units required in the major (lower division) Overlap with lower division General Education requirements.

#### Required Upper Division Health Sciences Core (9-10 units)

HSCI	488	Epidemiology Study of Disease	3
HSCI	390/L	Biostatistics and Lab	3/ 1
HSCI	384	Computers in Diagnostic Imaging*	2

\* Overlap with upper division General Education requirements.

TOTAL UNITS IN THE MAJOR	84
GENERAL EDUCATION UNITS	42
TOTAL UNITS REQUIRED FOR THE DEGREE	126

Upon successful completion (minimum of C in each course), the student shall earn a B.S. in Radiologic Sciences as well as a certificate of clinical completion from the clinical institutions. Completion of both academic and clinical work enables the student to sit for the national registry administered by the American Registry of Radiologic Technologists (ARRT) and the licensing exam given by the State of California (CRT).

#### **ADVISEMENT**

Individuals who are interested in the RS program and desire further information should contact the Health Sciences Department (818) 677-4081 or by e-mail: hsci@csun.edu or schedule an appointment through hsci.setmore.com. Complete program information is available at:

http://www.csun.edu/health-human-development/healthsciences/radiologic-sciences

#### FINANCIAL ASSISTANCE

The University makes a full range of financial assistance available to students. For information, contact the Financial Aid Office, (818) 677-3000 ext. #3

Last Updated: 04/2017

<sup>\*\*</sup>MATH 102 plus MATH 104 will also meet this requirement.