

# RADIOLOGIC SCIENCES (BSRS)

Degree: Bachelor of Science in Radiologic Sciences  
Major: Radiologic Sciences  
Program Code: 3623

The Baccalaureate of Science in Radiologic Sciences (BSRS) Program is accredited based by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The four-year program provides educational experiences to prepare a professional radiologic technologist to practice in a variety of health care settings. The program integrates theory, practice, and science with a broad liberal arts education. Following successful completion of the Radiologic Sciences Program and after meeting ethics and examination requirements, the graduate is eligible to sit for the national certification examination administered by the American Registry of Radiologic Technologists. A passing score on this examination results in the granting of a certificate of registration that allows the privilege to use the title "Registered Technologist" and to use the abbreviation R.T. following the graduate's name.

For more information on what you can do with this major, visit Career Services' [What to Do with a Major?](#) resource.

All CMU baccalaureate graduates are expected to demonstrate proficiency in specialized knowledge/applied learning, quantitative fluency, communication fluency, critical thinking, personal and social responsibility, and information literacy. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate written communication skills. \ (Communication fluency)
2. Assess oral communication techniques used in professional practice. (Communication fluency)
3. Relate ethical principles to real-life problems in the radiologic sciences. \ (Personal and Social Responsibility)
4. Combine academic theory with practitioner experience and skills. (Applied learning).
5. Reason and solve quantitative problems in the radiologic sciences. (Quantitative fluency)
6. Develop critical thinking and problem solving skills that demonstrate a professional level of expertise in the radiologic sciences. (Critical thinking).
7. Find relevant sources of information, evaluate information critically, and apply the information appropriately and effectively to professional practice in the radiologic sciences. (Information literacy)

## Requirements

Each section below contains details about the requirements for this program. Select a header to expand the information/requirements for that particular section of the program's requirements.

**To print or save an overview of this program's information, including the program description, learning outcomes, requirements, suggested course sequencing (if applicable), and advising and graduation information, scroll to the bottom of the left-hand navigation menu and select "Print Options."** This will give you the options to either "Send Page to Printer" or "Download PDF of This Page." The "Download PDF of This Page" option

prepares a much more concise presentation of all program information. The PDF is also printable and may be preferable due to its brevity.

## Institutional Degree Requirements

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree. A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

## Essential Learning Requirements

(31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

Code	Title	Semester Credit Hours
<b>English</b> <sup>1</sup>		
ENGL 111	English Composition I-GTCO1	3
ENGL 112	English Composition II-GTCO2	3
<b>Mathematics</b> <sup>1</sup>		
MATH 113	College Algebra-GTMA1 <sup>2</sup>	3
<b>History</b>		
Select one History course		3
<b>Humanities</b>		
Select one Humanities course		3
<b>Social and Behavioral Sciences</b> <sup>3</sup>		
Select one Social and Behavioral Sciences course		3

Select one Social and Behavioral Sciences course	3
<b>Fine Arts</b>	
Select one Fine Arts course	3
<b>Natural Sciences</b> <sup>4</sup>	
Select one Natural Sciences course	3
Select one Natural Sciences course with a lab <sup>5</sup>	4
<b>Total Semester Credit Hours</b>	<b>31</b>

<sup>1</sup> Must receive a grade of "C" or better and must be complete by the time the student has 60 semester hours.

<sup>2</sup> This is a 4 credit course. 3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit.

<sup>3</sup> PSYC 150 and PSYC 233 are recommended.

<sup>4</sup> 7 semester hours, one course must include a lab.

<sup>5</sup> BIOL 101 and BIOL 101L are recommended.

## Other Lower Division Requirements

Code	Title	Semester Credit Hours
<b>Wellness Requirement</b>		
KINE 100	Health and Wellness	1
Select one Activity course		1
<b>Essential Learning Capstone</b> <sup>1</sup>		
ESSL 290	Maverick Milestone	3
ESSL 200	Essential Speech	1
<b>Total Semester Credit Hours</b>		<b>6</b>

## Foundation Courses

(15-16 semester hours, must earn a grade of "C" or higher in each course.)

Code	Title	Semester Credit Hours
BIOL 209 & 209L	Human Anatomy and Physiology I and Human Anatomy and Physiology I Laboratory	4
BIOL 210 & 210L	Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory	4
BIOL 241	Pathophysiology	4
STAT 200 or STAT 215	Probability and Statistics-GTMA1 Statistics for Social and Behavioral Sciences	3-4
<b>Total Semester Credit Hours</b>		<b>15-16</b>

## Program Specific Degree Requirements

(67 semester hours, must earn a grade of "C" or higher in each course.)

Code	Title	Semester Credit Hours
<b>Core Courses</b>		
RADS 320 & 320L	Introduction to Radiologic Technology and Patient Care and Introduction to Radiologic Technology and Patient Care Laboratory	4

RADS 321 & 321L	Radiographic Anatomy and Positioning I and Radiographic Anatomy and Positioning I Laboratory	3
RADS 322 & 322L	Principles of Radiographic Exposure and Principles of Radiographic Exposure Laboratory	3
RADS 323	Digital Imaging	2
RADS 331 & 331L	Radiographic Anatomy and Positioning II and Radiographic Anatomy and Positioning II Laboratory	3
RADS 332	Specialized Imaging	2
RADS 333 & 333L	Imaging Equipment and Quality Assurance and Imaging Equipment and Quality Assurance Laboratory	3
RADS 334	Image Analysis I	2
RADS 335	Radiation Biology and Protection	2
RADS 354	Image Analysis II	2
RADS 451	Imaging Pathology	3
RADS 452	Sectional Anatomy	3
RADS 453	Advanced Patient Care	3
RADS 461	Principles of Computed Tomography	2
RADS 462	Leadership and Management	3
RADS 463	Information Literacy in Radiologic Sciences	3
RADS 464	Senior Capstone	3
<b>Clinical Courses</b>		
RADS 329	Radiographic Clinical Experience I	1
RADS 339	Radiographic Clinical Experience II	4
RADS 449	Radiographic Clinical Experience III	6
RADS 459	Radiographic Clinical Experience IV	5
RADS 469	Radiographic Clinical Experience V	5
<b>Total Semester Credit Hours</b>		<b>67</b>

## General Electives

All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 1 semester hours

Code	Title	Semester Credit Hours
MATH 113	College Algebra-GTMA1	1
<b>Total Semester Credit Hours</b>		<b>1</b>

## Suggested Course Plan

First Year	Semester	Semester Credit Hours
<b>Fall Semester</b>		
ENGL 111	English Composition I-GTCO1	3
PSYC 150	General Psychology-GTSS3	3
KINE 100	Health and Wellness	1
Essential Learning - History		3
BIOL 101 & 101L	General Human Biology-GTSC1 and General Human Biology Laboratory-GTSC1	4
<b>Semester Credit Hours</b>		<b>14</b>
<b>Spring Semester</b>		
ENGL 112	English Composition II-GTCO2	3

MATH 113	College Algebra-GTMA1	4
PSYC 233	Human Growth and Development-GTSS3	3
BIOL 209 & 209L	Human Anatomy and Physiology I and Human Anatomy and Physiology I Laboratory	4
<b>Semester Credit Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall Semester</b>		
Essential Learning - Fine Arts		3
Essential Learning - Humanities		3
Essential Learning - Natural Science		3
BIOL 210 & 210L	Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory	4
<b>Semester Credit Hours</b>		<b>13</b>
<b>Spring Semester</b>		
BIOL 241	Pathophysiology	4
ESSL 290	Maverick Milestone	3
ESSL 200	Essential Speech	1
STAT 200 or STAT 215	Probability and Statistics-GTMA1 or Statistics for Social and Behavioral Sciences	3-4
KINA Activity		1
<b>Semester Credit Hours</b>		<b>12-13</b>
<b>Third Year</b>		
<b>Fall Semester</b>		
RADS 320 & 320L	Introduction to Radiologic Technology and Patient Care and Introduction to Radiologic Technology and Patient Care Laboratory	4
RADS 321 & 321L	Radiographic Anatomy and Positioning I and Radiographic Anatomy and Positioning I Laboratory	3
RADS 322 & 322L	Principles of Radiographic Exposure and Principles of Radiographic Exposure Laboratory	3
RADS 323	Digital Imaging	2
RADS 329	Radiographic Clinical Experience I	1
<b>Semester Credit Hours</b>		<b>13</b>
<b>Spring Semester</b>		
RADS 331 & 331L	Radiographic Anatomy and Positioning II and Radiographic Anatomy and Positioning II Laboratory	3
RADS 332	Specialized Imaging	2
RADS 333 & 333L	Imaging Equipment and Quality Assurance and Imaging Equipment and Quality Assurance Laboratory	3
RADS 334	Image Analysis I	2
RADS 335	Radiation Biology and Protection	2
RADS 339	Radiographic Clinical Experience II	4
<b>Semester Credit Hours</b>		<b>16</b>
<b>Summer Semester</b>		
RADS 449	Radiographic Clinical Experience III	6
<b>Semester Credit Hours</b>		<b>6</b>
<b>Fourth Year</b>		
<b>Fall Semester</b>		
RADS 354	Image Analysis II	2
RADS 451	Imaging Pathology	3
RADS 452	Sectional Anatomy	3
RADS 453	Advanced Patient Care	3
RADS 459	Radiographic Clinical Experience IV	5
<b>Semester Credit Hours</b>		<b>16</b>
<b>Spring Semester</b>		
RADS 461	Principles of Computed Tomography	2
RADS 462	Leadership and Management	3
RADS 463	Information Literacy in Radiologic Sciences	3
RADS 464	Senior Capstone	3

RADS 469	Radiographic Clinical Experience V	5
<b>Semester Credit Hours</b>		<b>16</b>
<b>Total Semester Credit Hours</b>		<b>120-121</b>

## Advising and Graduation

### Advising Process and DegreeWorks

Documentation on the pages related to this program is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for their intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

## Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at <http://www.coloradomesa.edu/registrar/graduation.html>.

If a student's petition for graduation is denied, it will be their responsibility to consult the Registrar's Office regarding next steps.