Radiologic Technologists

Inland Empire/Desert Region (Riverside and San Bernardino counties combined)

Summary

- Employment for radiologic technologists is expected to **increase by 12% between 2018 and 2023** in the Inland Empire/Desert region. A total of **684 job openings, or 137 annual job openings** will be available over the five-year timeframe.

- The **entry-level wage** for radiologic technologists is **above the MIT Living Wage estimate of $12.39 per hour** for a single adult living in the Inland Empire/Desert region.

- **There appears to be an opportunity for program growth** because there are more annual job openings for radiologic technologists **(137 average annual openings)** than annual credentials issued for the selected community college programs in the region **(39 annual average community college credentials, 40 other educational institution credentials, 79 total).**

Introduction

The California Community College radiologic technology (TOP 1225.00) program prepares students for employment as radiologic technologists by providing instruction in the principles and techniques used in diagnostic radiography. This includes radiographic techniques, radiation protection, equipment maintenance, and film processing and darkroom techniques (Taxonomy of Programs, 2012). The occupational description for radiologic technologists is listed below.

Radiologic Technologists (29-2034)

Take x-rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Includes technologists who specialize in other scanning modalities.

Sample job titles: Computed Tomography Technologist (CT Technologist), Mammographer, Mammography Technologist, Radiographer, Radiologic Technologist (RT), Radiological Technologist, Radiology Technologist, Staff Technologist, X-Ray Technologist (X-Ray Tech)

Entry-Level Educational Requirement: Associate degree
Training Requirement: None
Work Experience Required: None
Incumbent workers with a Community College Award or Some Postsecondary Coursework: 59%

Job Opportunities

In 2018, there were 1,741 radiologic technologist jobs in the Inland Empire/Desert region (IEDR). This occupation is projected to increase employment by 12% by 2023. Employers in the region will need to hire 684 workers over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). Exhibit 1 displays five-year projections for radiologic technologists in the IEDR.

Exhibit 1: Five-year projections for radiologic technologists

2018 Jobs	2023 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
1,741	1,955	12%	684	137	18%

Source: EMSI 2019.2

Earnings

The entry-level wage for radiologic technologists is above the MIT Living Wage estimate of $12.39 per hour for a single adult living in the IEDR (Glasmeier, 2019). This wage is also sufficient for two working adults and one child ($14.75 per hour, per adult, or $30,680 annually for each adult). Exhibit 2 displays wage information for radiologic technologists in the Inland Empire/Desert region.

Exhibit 2: Earnings for radiologic technologists

Entry to Experienced Hourly Wage Range (25th to 75th percentile)	Median Wage (50th percentile)	Average Annual Earnings
$28.29 to $39.32	$34.30	$70,500

Source: EMSI 2019.2

Job Postings, Employers, Skills, Education, and Certifications

Exhibit 3 displays the number of job ads posted during the last 12 months along with the regional and statewide average time to fill for radiologic technologists in the IEDR. On average, local employers fill online job postings for radiologic technologists within 40 days. This regional average is the same as the statewide average, indicating that local employers fill open positions within a similar timeframe as other California employers.

Exhibit 3: Job ads and time to fill for radiologic technologists, May 2018 – Apr 2019

Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
344	40	40

Source: Burning Glass – Labor Insights

Exhibit 4 displays the employers posting the most job ads for radiologic technologists during the last 12 months in the IEDR.

Exhibit 4: Employers posting the most job ads, May 2018 – Apr2019

Occupation	Employers
Radiologic Technologists *(n=281)*	• Loma Linda University Health • Temecula Valley Hospital • Riverside Community Hospital

Source: Burning Glass – Labor Insights

Exhibit 5 displays a sample of specialized and employability skills that employers are seeking when looking for workers to fill radiologic technologist positions. Specialized skills are occupation-specific skills that employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as "soft skills." The skills requested in job postings may be utilized as a helpful guide for curriculum development.

Exhibit 5: Sample of in-demand skills from employer job ads, May 2018 – Apr2019

Occupation	Specialized Skills	Employability Skills
Radiologic Technologists *(n=317)*	• X-Rays • Patient Care • Ultrasound	• Teamwork/Collaboration • Communication Skills • English

Source: Burning Glass – Labor Insights

Exhibit 6 displays the work experience and entry-level education typically required to enter this occupation according to the Bureau of Labor Statistics (BLS), educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census (2016-17), and the minimum advertised education requirement from employer job ads.

Exhibit 6: Work experience, typical entry-level education, educational attainment, and minimum advertised education requirements for radiologic technologists, May 2018 – Apr2019

Occupation	Typical Entry-Level Education Requirement	Educational Attainment*	Minimum Advertised Education Requirement from Job Ads			
			Number of Job Ads (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Radiologic Technologists	Associate degree	59%	237	-	93%	7%

Source: EMSI 2019.2, Burning Glass – Labor Insights
*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework.

The statewide regulatory agency for radiologic technologists is the Radiologic Health Branch (RHB), which is within the Radiation Safety and Environmental Management Division of the California Department of Public Health. Radiologic technologist licensing is available through the American Registry of Radiologic Technologists (ARRT), which is a leading national credentialing organization for radiation therapy. For more information about radiologic technologist requirements and credentials, visit the AART website (2019). Exhibit 7 displays the certifications required by employers posting job ads for the radiologic technologists in the Inland Empire/Desert region.

Exhibit 7: Top certifications required by employer job ads in the Inland Empire/Desert region, May 2018 – Apr2019

Occupation	Certifications
Radiologic Technologists *(n=283)*	• American Registry of Radiologic Technologists (ARRT) • Basic Life Support (BLS)

Source: Burning Glass – Labor Insights

Student Completions and Program Outcomes

Exhibit 8 displays the average annual regional California Community College (CCC) credentials conferred during the three academic years between 2014 and 2017, from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, along with enrollments from the most recent year available on LaunchBoard. Credentials are the combined total of associate degrees and certificates issued during the timeframe, divided by three in order to calculate an annual average. This is done to minimize the effect of atypical variation that might be present in a single year. Enrollments are the count of enrollments in courses assigned to the TOP code in the selected year. The relevant TOP code is from the Taxonomy of Programs manual, and the corresponding program titles used at each college (in *italics*) are sourced from the Chancellor's Office Curriculum Inventory (COCI). Please note, a credential is not always equal to a single person in search of a job opening since a student may earn more than one credential, such as an associate degree in addition to a certificate.

Exhibit 8: Annual average community college credentials and enrollments for the radiologic technology program in the Inland Empire/Desert region

1225.00 – Radiologic Technology	CCC Enrollments, Academic Year 2016-17	CCC Annual Average Credentials, Academic Years 2014-17
Chaffey – *Radiologic Technology*	576	
Associate Degree		24
Crafton Hills – *Radiologic Technology*	311	
Associate Degree		8
Certificate 60+ semester units		7

1225.00 – Radiologic Technology	CCC Enrollments, Academic Year 2016-17	CCC Annual Average Credentials, Academic Years 2014-17
Total CCC Enrollments, Academic Year 2016-17	887	
Total Annual Average CCC Credentials, Academic Years 2014-17		39

Source: LaunchBoard, MIS Data Mart, COCI

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which comes from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from records provided by California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported in order to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2019a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2017). Data from the latest academic year for each metric is provided in Exhibit 9.

Exhibit 9: Radiologic technology strong workforce program outcomes

Strong Workforce Program Metrics: 1225.00 – Radiologic Technology Academic Year 2015-16, unless noted otherwise	Inland Empire/Desert Region	California Median
Course enrollments (2016-17)	887	525
Completed 12+ units in one year (2016-17)	65	46
Economically disadvantaged students* (2016-17)	80%	84%
Employed in the fourth fiscal quarter after exit (completers)	94%	90%
Median annual earnings* (completers)	$73,558	$58,198
Job closely related to the field of study (2014-15)	93%	92%
Median change in earnings (completers)	615%	191%
Attained a living wage (completers and skills-builders)	74%	76%

Source: LaunchBoard
*Data for these metrics is available in Community College Pipeline. All others are available in Strong Program Workforce Metrics.

Credentials granted from other educational providers outside of the California Community College system are displayed in Exhibit 9, along with the relevant CIP code. This is final release data compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available.

Exhibit 9: Annual average other educational institution completions for the medical radiologic technology/science – radiation therapist program in the Inland Empire/Desert Region

51.0907 – Medical Radiologic Technology/Science – Radiation Therapist	Other Educational Institutions Annual Average Certificates or Other Credit Credentials (2013-16)
Loma Linda University	
Associate Degree	32
Award 1 < 2 academic yrs	8
Total annual average other awards, Academic Years 2013-16	**40**

Source: IPEDS

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