



## **Pre-Radiography Certificate (TOP 1225.00)**

**March 2024**

**Prepared by the South Central Coast Center of Excellence for  
Labor Market Research**

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### **Program Recommendation**

This report was compiled by the South Central Coast<sup>1</sup> Center of Excellence to provide regional labor market data for the program recommendation – radiography. This report can help determine whether there is demand in the local labor market that is not being met by the supply from programs of study that align with this occupation group.

### **Key Findings**

- In 2022, there were 1,368 jobs for radiography-related occupations in the South Central Coast Region.
- This number is expected to increase by 10% through 2027.
- Projections show approximately 134 annual openings in the region. There were 109 awards conferred in relevant programs, indicating a slight undersupply.
- The typical entry-level education for the four occupations included in this report is an associate degree.

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<sup>1</sup> The South Central Coast Region consists of San Luis Obispo County, Santa Barbara County, Ventura County, and the following cities from North Los Angeles County: Canyon Country, Castaic, Lake Hughes, Lancaster, Littlerock, Llano, Newhall, Palmdale, Pearblossom, Santa Clarita, Stevenson Ranch, and Valencia.

## Occupation Codes and Descriptions

There are four occupations in the standard occupational classification (SOC) system that were identified for this analysis. The occupation titles and descriptions, as well as reported job titles, are included in Exhibit 1.

**Exhibit 1 – Occupation, Description, and Sample Job Titles**

SOC Code	Title	Description	Sample of Reported Job Titles
29-1124	<b>Radiation Therapists</b>	Provide radiation therapy to patients as prescribed by a radiation oncologist according to established practices and standards. Duties may include reviewing prescription and diagnosis; acting as liaison with physician and supportive care personnel; preparing equipment, such as immobilization, treatment, and protection devices; and maintaining records, reports, and files. May assist in dosimetry procedures and tumor localization.	Computed Tomography Simulation Therapist (CT Simulation Therapist), Dosimetrist, Medical Dosimetrist, Radiation Therapist (RT), Radiation Therapy Technologist (RTT), Registered Radiation Therapist, Staff Radiation Therapist
29-2031	<b>Cardiovascular Technologists and Technicians</b>	Conduct tests on pulmonary or cardiovascular systems of patients for diagnostic, therapeutic, or research purposes. May conduct or assist in electrocardiograms, cardiac catheterizations, pulmonary functions, lung capacity, and similar tests.	Cardiac Catheterization Laboratory Technologist, Cardiac Catheterization Technician, Cardiac Technician, Cardio Tech (Cardiovascular Technician), Cardiology Technician, Cardiopulmonary Technician, Cardiovascular Technologist (CVT), Electrocardiogram Technician (EKG Tech), Registered Cardiovascular Invasive Specialist (RCIS)

29-2032	<b>Diagnostic Medical Sonographers</b>	Produce ultrasonic recordings of internal organs for use by physicians. Includes vascular technologists.	Cardiac Sonographer, Diagnostic Medical Sonographer, Medical Sonographer, Registered Diagnostic Medical Sonographer (RDMS), Sonographer, Staff Sonographer, Ultrasonographer, Ultrasound Technician (Ultrasound Tech), Ultrasound Technologist (Ultrasound Tech)
29-2034	<b>Radiologic Technologists and Technicians</b>	Take x-rays and CAT scans or administer nonradioactive materials into patient's bloodstream for diagnostic or research purposes. Includes radiologic technologists and technicians who specialize in other scanning modalities.	Computed Tomography Technologist (CT Tech), Diagnostic Radiologic Technologist (DRT), Imaging Technologist (Imaging Tech), Mammographer, Radiographer, Radiologic Technologist (RT), Radiology Technician (Radiology Tech), Registered Radiologic Technologist (RT (R)), X-Ray Technician (X-Ray Tech), X-Ray Technologist (X-Ray Tech)

Source: O\*NET Online

## Current and Future Employment

In the South Central Coast region, the number of jobs for the four radiography occupations is expected to increase 10% through 2027. More than 130 annual openings are expected through 2027.

**Exhibit 2 – Five-Year Projections for Radiography Occupations  
in the South Central Coast Region**

SOC	Occupation	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change	Annual Openings
29-1124	Radiation Therapists	31	34	3	8%	12
29-2031	Cardiovascular Technologists and Technicians	304	327	24	8%	29
29-2032	Diagnostic Medical Sonographers	341	379	38	11%	41
29-2034	Radiologic Technologists and Technicians	692	762	70	10%	52
		<b>1,368</b>	<b>1,502</b>	<b>134</b>	<b>10%</b>	<b>134</b>

Source: Lightcast™ Analyst 2023

## Earnings

Exhibit 3 contains hourly wages for the four occupations of interest. Entry-level hourly earnings are represented by the 25<sup>th</sup> percentile of wages, median hourly earnings are represented by the 50<sup>th</sup> percentile of wages, and experienced hourly earnings are represented by the 75<sup>th</sup> percentile of wages, demonstrating various levels of employment.

**Exhibit 3 – Earnings for Radiography Occupations in the  
South Central Coast Region**

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
29-1124	Radiation Therapists	\$50.48	\$61.76	\$76.84
29-2031	Cardiovascular Technologists and Technicians	\$35.96	\$44.01	\$49.34
29-2032	Diagnostic Medical Sonographers	\$35.95	\$50.61	\$62.53
29-2034	Radiologic Technologists and Technicians	\$36.24	\$44.42	\$50.59

Source: Lightcast™ Analyst 2023

**Exhibit 3b – Earnings for Radiography Occupations in the South Central Coast Region**



Source: Family Needs Calculator (Living wage is based on Single Adult households with no children); Lightcast™ Analyst 2023

## Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for the occupations relevant to the field of study. Employer job postings are consulted to understand who is looking for professionals in a given field, and what they are looking for in potential candidates. To identify relevant job postings, the following standard occupational classifications were used:

29-1124	Radiation Therapists
29-2031	Cardiovascular Technologists and Technicians
29-2032	Diagnostic Medical Sonographers
29-2034	Radiologic Technologists and Technicians

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## Top Occupations

In 2023, there were 1,259 employer postings for the four radiography occupations.

**Exhibit 4 – Top Occupations by Job Postings**

<b>SOC Code</b>	<b>Occupation</b>	<b>Job Postings, Full Year 2023</b>
29-2034	Radiologic Technologists and Technicians	674
29-2031	Cardiovascular Technologists and Technicians	372
29-2032	Diagnostic Medical Sonographers	208
29-1124	Radiation Therapists	5
	<b>Total</b>	<b>1,259</b>

Source: Lightcast™ Analyst 2023

## Top Titles

The top job titles for employers posting ads for radiography occupations are listed in Exhibit 5. Radiology Technologists is mentioned as the job title (149 job postings).

**Exhibit 5 – Job Titles**

<b>Title</b>	<b>Job Postings, Full Year 2023</b>
Radiology Technologists	149
Travel Radiology Technicians	89
Travel Interventional Radiology Technologists	58
X-Ray Technicians	50
Travel Echo Technicians	43
Sonographers	41
Monitor Technicians	41
Travel X-Ray Techs	38
Radiologic Technologists	37
Ultrasound Technicians	37

Source: Lightcast™ Analyst 2023

## Top Employers

Exhibit 6 lists the major employers hiring professionals in the field of interest. The top employer posting job ads was Healthcare Employment Network. The top worksite cities for these occupations were San Luis Obispo; Oxnard; Santa Maria; Thousand Oaks; Santa Barbara

**Exhibit 6 – Top Employers**

<b>Employer</b>	<b>Job Postings, Full Year 2023</b>
Healthcare Employment Network	122
CommonSpirit Health	71
Siemens	61
Twin Cities Community Hospital	40
HCA Healthcare	33
Adventist Health	31
RadNet	31
LRS Healthcare	30
Cottage Health	25
Nomad Health	24

Source: Lightcast™ Analyst 2023

## Skills

The tables in Exhibit 7 list employers' most commonly requested skills in job postings related to radiography occupations. Radiology is the most sought-after specialized skill for employers. Communication was the most requested baseline skill. Microsoft Outlook was the most requested software skill.

**Exhibit 7 – Specialized Skills**

Skills	Job Postings, Full Year 2023
Radiology	646
Medical Ultrasonography	335
Fluoroscopy	195
Radiography	184
Mammography	118
Obstetrics and Gynecology	105
Interventional Radiology	104
Electrocardiography	102
Cardiopulmonary Resuscitation (CPR)	99
Patient Positioning	87

Source: Lightcast™ Analyst 2023

**Exhibit 7b – Baseline Skills**

Skills	Job Postings, Full Year 2023
Communication	359
Customer Service	175
Ingenuity	88
Tactfulness	87
Organizational Skills	78
Self-Motivation	76
Computer Literacy	73
Team Oriented	73
Clerical Works	68
Management	66

Source: Lightcast™ Analyst 2023



**Exhibit 7c – Software and Programming Skills**

<b>Skills</b>	<b>Job Postings, Full Year 2023</b>
Microsoft Outlook	18
Epic EMR	18
Microsoft Office	16
Microsoft Excel	14
Medical Software	13

Source: Lightcast™ Analyst 2023

**Education and Training**

Exhibit 8 shows the typical entry-level education requirement for radiography occupations, along with the typical on-the-job training needed to attain competency in the occupations.

**Exhibit 8 – Education and Training Requirements**

<b>SOC</b>	<b>Occupation</b>	<b>Typical entry-level education</b>	<b>Typical on-the-job training</b>
29-1124	Radiation Therapists	Associate degree	None
29-2031	Cardiovascular Technologists and Technicians	Associate degree	None
29-2032	Diagnostic Medical Sonographers	Associate degree	None
29-2034	Radiologic Technologists and Technicians	Associate degree	None

Source: Bureau of Labor Statistics Employment Projections (Educational Attainment)

### Regional Completions and Openings

Between 2019 and 2022, there were 109 awards conferred in the South Central Coast region aligned with five programs that have historically trained for the four occupations of interest.

**Exhibit 9 – Three-Year Average of Awards Conferred in the Region**

TOP/CIP Code	Program	3-Year Average (2019-2022)
1215.00	Electrocardiography	12
1225.00	Radiologic Technology	46
1227.00	Diagnostic Medical Sonography	5
51.0901	Cardiovascular Technology/Technologist	-
51.0902	Electrocardiograph Technology/Technician	-
51.0907	Medical Radiologic Technology/Science - Radiation Therapist	10
51.0910	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	36
51.0911	Radiologic Technology/Science - Radiographer	-
	<b>Average</b>	<b>109</b>

Source: Datamart and IPEDS

## CCC Awards

Exhibit 10 shows the average number of awards granted by community colleges within programs historically dedicated to training for radiography-related occupations.

**Exhibit 10 – CCC Awards in the South Central Coast Region, 2019-2022 Average**

CCC Programs	3-Year Average
Allan Hancock	12
Antelope Valley	9
Moorpark	16
Santa Barbara	26

Source: DataMart, 2023

**Sources**

O\*Net Online, Lightcast™ Analyst 2023, MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

**Notes**

Data included in this analysis represent the labor market demand for relevant positions most closely related to radiography. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions. All representations have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. The most recent data available at the time of the analysis was examined; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.