

# Computed Tomography Occupations Labor Market Information Report Cabrillo College

Prepared by the San Francisco Bay Center of Excellence  
for Labor Market Research  
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## Recommendation

Based on all available data, there appears to be an undersupply of Computed Tomography workers compared to the demand for this cluster of occupations in the Bay region and in the SC-Monterey sub-region (Monterey, San Benito, and Santa Cruz Counties.) There is a projected annual gap of about 242 students in the Bay region and 4 students in the SC-Monterey Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 1225.00 - Radiologic Technology in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Cabrillo College and in the region.

## Introduction

This report profiles Computed Tomography Occupations in the 12 county Bay region and in the SC-Monterey sub-region for the review of an existing program at Cabrillo College.

- **Radiologic Technologists (SOC 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. Excludes "Diagnostic Medical Sonographers" (29-2032) and "Magnetic Resonance Imaging Technologists" (29-2035).
  - Entry-Level Educational Requirement: Associate's degree
  - Training Requirement: None
  - Percentage of Community College Award Holders or Some Postsecondary Coursework: 60%
- **Magnetic Resonance Imaging Technologists (SOC 29-2035):** Operate Magnetic Resonance Imaging (MRI) scanners. Monitor patient safety and comfort, and view images of area being scanned to ensure quality of pictures. May administer gadolinium contrast dosage intravenously. May interview patient, explain MRI procedures, and position patient on examining table. May enter into the computer data such as patient history, anatomical area to be scanned, orientation specified, and position of entry.
  - Entry-Level Educational Requirement: Associate's degree
  - Training Requirement: None
  - Percentage of Community College Award Holders or Some Postsecondary Coursework: 60%

## Occupational Demand

**Table 1. Employment Outlook for Computed Tomography Occupations in Bay Region**

Occupation	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Radiologic Technologists	4,146	4,561	416	10%	1,515	303	\$31.18	\$42.84
Magnetic Resonance Imaging Technologists	1,009	1,099	90	9%	362	72	\$34.63	\$44.30
<b>Total</b>	<b>5,154</b>	<b>5,660</b>	<b>506</b>	<b>10%</b>	<b>1,877</b>	<b>375</b>	<b>\$31.85</b>	<b>\$43.13</b>

Source: EMSI 2019.3

**Bay Region** includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Computed Tomography Occupations in SC-Monterey Sub-Region**

Occupation	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Radiologic Technologists	266	285	19	7%	90	18	\$35.41	\$45.65
Magnetic Resonance Imaging Technologists	55	59	4	7%	19	4	\$19.29	\$26.91
<b>TOTAL</b>	<b>321</b>	<b>345</b>	<b>23</b>	<b>7%</b>	<b>108</b>	<b>22</b>	<b>\$32.64</b>	<b>\$42.43</b>

Source: EMSI 2019.3

SC-Monterey Sub-Region includes Monterey, San Benito, and Santa Cruz Counties

### Job Postings in Bay Region and SC-Monterey Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (January 2019 - December 2019)**

Occupation	Bay Region	4 Counties	SC-Monterey
Radiologic Technologists	1,531	479	94
Magnetic Resonance Imaging Technologists	1,031	250	55
<b>Total</b>	<b>2,562</b>	<b>729</b>	<b>149</b>

Source: Burning Glass

**Table 4a. Top Job Titles for Computed Tomography Occupations for latest 12 months (January 2019 - December 2019) Bay Region**

Common Title	Bay	Common Title	Bay
Radiologic Technologist	689	Senior Technologist	14
MRI Technologist	332	Imaging Mammographer	12
Radiology Technician	312	Ultrasound - Imaging	11
CT Technician	261	Diagnostic Imaging Technologist	11
CT Technologist	220	Medical Technician	10
Mammography Technologist	203	Senior Technician	8
MRI Technician	120	Radiologist	8
Imaging Specialist	30	Diagnostic Radiologic Technologist	8
Technologist	20	Radiological Control Technician	7
Radiologic Technician	20	Acute Care Travel Technologist	7
Mammographer/Technician, Travel	20	Mammographer	6
Technician	18	Cat Scan Technologist	6
Pacs Administrator	17	Senior X - Rays Technologist	5
Radiological Technologist	16	Radiologic Technician, C++	5

**Table 4b. Top Job Titles for Computed Tomography Occupations for latest 12 months (January 2019 - December 2019) 4 County Region**

Common Title	4 Counties	Common Title	4 Counties
Radiologic Technologist	180	Prepper/Operator	4
Radiology Technician	127	X - Rays Technician	3
CT Technologist	89	Medical Technician	3
MRI Technologist	72	Ct Technical Coordinator	3
Mammography Technologist	69	Ultrasound - Imaging	2
CT Technician	44	Supervising Diagnostic Imaging Technologist	2
MRI Technician	22	Strong Visualization Candidate	2
Senior Technologist	13	Staff Technologist	2
Technologist	12	Radiologic Technician	2
Mammographer/Technician, Travel	8	Pt Radiologic Technology Instructor	2
Imaging Specialist	7	Nuclear Technician	2
Pacs Administrator	6	Imaging Mammographer	2
Technician	5	Gastroenterologist	2
Radiologist	4	Diagnostic Radiologic Technologist	2

Source: Burning Glass  
Monterey, San Benito, Santa Cruz and Santa Clara Counties

**Table 4c. Top Job Titles for Computed Tomography Occupations for latest 12 months (January 2019 - December 2019) SC-Monterey Sub-Region**

Common Title	SC-Monterey	Common Title	SC-Monterey
Radiologic Technologist	43	Medical Technician	2
Mammography Technologist	23	Diagnostic General Mammographer/Radiographer	2
Radiology Technician	20	X - Rays Technologist	1
CT Technologist	17	Travel Special Technician	1
CT Technician	15	Technician, Travel, Information And Technology Industry	1
MRI Technician	9	Pacs Software Administrator/Analyst, Healthcare Industry	1
MRI Technologist	6	Mammographer	1
Technician	3	Laboratory Technologist	1

Source: Burning Glass

## Industry Concentration

**Table 5. Industries hiring Computed Tomography Workers in Bay Region**

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2018)	Jobs in Industry (2022)	% Change (2018-22)	% in Industry (2018)
General Medical and Surgical Hospitals (622110)	1,789	1,731	-3%	34%
HMO Medical Centers (621491)	770	1,001	30%	15%
Hospitals (Local Government) (903622)	641	693	8%	13%
Offices of Physicians (except Mental Health Specialists) (621111)	584	588	1%	11%
Medical Laboratories (621511)	485	624	29%	10%
Diagnostic Imaging Centers (621512)	143	178	24%	3%
Hospitals (State Government) (902622)	127	166	31%	2%
Freestanding Ambulatory Surgical and Emergency Centers (621493)	99	134	35%	2%
All Other Outpatient Care Centers (621498)	92	130	41%	2%
Kidney Dialysis Centers (621492)	62	71	15%	1%
Federal Government, Civilian, Excluding Postal Service (901199)	60	58	-3%	1%

Source: EMSI 2019.3

**Table 6. Top Employers Posting Computed Tomography Occupations in Bay Region and SC-Monterey Sub-Region (January 2019 - December 2019)**

Employer	Bay	Employer	4 Counties	Employer	SC-Monterey
Kaiser Permanente	176	Stanford Health Care	39	Dignity Health	9
Sutter Health	119	Hospital Corporation of America	37	Kpg Healthcare	7
Sutter Health Sacramento Sierra Region	80	Lucile Packard Childrens Hospital	29	Bakersfield Memorial Hospital	7
Nursefly Travel Nursing	77	Alliance Healthcare Services	29	Salinas Valley Memorial Hospital	6
Alliance Healthcare Services	75	Nursefly Travel Nursing	25	Nursefly Travel Nursing	6
Sutter Medical Center	61	Radnet	20	Community Hospital Of The Monterey Peninsula	6
Kpg Healthcare	50	Sutter Health	16	Sutter Medical Center	5
UC San Francisco Medical Center	49	Regional Medical Center San Jose	15	Sutter Health	5
Stanford Health Care	42	Radnet Management	15	Salinas Valley Memorial Healthcare	5
Dignity Health	41	Kaiser Permanente	15	Sutter Health Sacramento Sierra Region	4
Hospital Corporation of America	37	Sutter Health Sacramento Sierra Region	13	Emerald Health Services	4
Emerald Health Services	35	Humana	12	Cross Country Allied	3
Cross Country Allied	35	Emerald Health Services	11	Titan Medical Group	2
Radnet	32	Sutter Medical Center	10	Soliant	2
UC San Diego	31	Kpg Healthcare	10	Natividad	2
Radnet Management	30	Ansible Government Solutions	10	Kaiser Permanente	2
Lucile Packard Childrens Hospital	30	Dignity Health	9	Ansible Government Solutions	2

Source: Burning Glass

## Educational Supply

There are six (6) community colleges in the Bay Region issuing 133 awards on average annually (last 3 years) on TOP 1225.00 - Radiologic Technology. There is one college (Cabrillo) in the SC-Monterey Sub-Region issuing 18 awards on average annually (last 3 years) on this TOP code.

**Table 7. Awards on TOP 1225.00 - Radiologic Technology in Bay Region**

College	Sub-Region	Associates	Certificate 18+ units	Total
Cabrillo College	Santa Cruz-Monterey	18		18
Cañada College	Mid-Peninsula	18		18
City College of San Francisco	Mid-Peninsula	26		26
Foothill College	Silicon Valley	19		19
Merritt College	East Bay	15	14	29
Santa Rosa Junior College	North Bay	17	6	23
<b>Total Bay Region</b>		<b>113</b>	<b>20</b>	<b>133</b>
<b>Total SC-Monterey Sub-Region</b>		<b>18</b>	<b>0</b>	<b>18</b>

Source: Data Mart

Note: The annual average for awards is 2015-16 to 2017-18.

## Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 375 annual openings for the Computed Tomography occupational cluster and 133 annual (3-year average) awards for an annual undersupply of 242 students. In the SC-Monterey Sub-Region, there is a small gap with 22 annual openings and 18 annual (3-year average) awards for an annual undersupply of 4 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1225.00 - Radiologic Technology**

2015-16	Bay (All CTE Programs)	Cabrillo College (All CTE Programs)	State (1 225.00)	Bay (1 225.00)	SC-Monterey (1 225.00)	Cabrillo College (1 225.00)
% Employed Four Quarters After Exit	74%	77%	82%	81%	76%	76%
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$8,150	\$14,704	\$18,404	\$16,443	\$16,443
Median % Change in Earnings	46%	58%	150%	145%	64%	64%
% of Students Earning a Living Wage	63%	54%	76%	81%	92%	92%

Source: Launchboard Pipeline (version available on 1/24/20)

## Skills, Certifications and Education

**Table 9. Top Skills for Computed Tomography Occupations in Bay Region (January 2019 - December 2019)**

Skill	Postings	Skill	Postings	Skill	Postings
Radiology	1,506	Diagnostic Radiology	295	Advanced Cardiac Life Support (ACLS)	168
Radiologic Technology	1,213	Radiography	249	Disease Diagnosis	157
X-Rays	784	Scheduling	248	Ionizing Radiation	144
Patient Care	634	Patient Positioning	245	Physiology	129
Cardiopulmonary Resuscitation (CPR)	569	X-Ray (Radiography) Equipment	242	Interaction with Patients / Medical Personnel	116
Life Support	475	Repair	240	Patient Preparation	114
Mammography	453	Image Processing	236	Interventional Radiology (IR)	106
Diagnostic Imaging	417	Ultrasound	222	Hospital Experience	97
Quality Assurance and Control	368	Computed Tomography (CT)	221	Patient Monitoring	94
Magnetic Resonance Imaging (MRI)	361	Radiation Protection	197	Computed Axial Tomography (CAT Scan)	90
Venipuncture	347	Anatomy	191	Patient Transportation and Transfer	90
Acute Care	323	Patient Safety	188	Radiology Equipment	87
Radiology	1,506	Diagnostic Radiology	295	Advanced Cardiac Life Support (ACLS)	168
Radiologic Technology	1,213	Radiography	249	Disease Diagnosis	157
X-Rays	784	Scheduling	248	Ionizing Radiation	144

Source: Burning Glass

**Table 10. Certifications for Computed Tomography Occupations in Bay Region (January 2019 - December 2019)**

Note: 54% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Certification	Postings	Certification	Postings
American Registry of Radiologic Technologists (ARRT) Certification	1,532	IV (Intravenous) Certification	42
Basic Life Saving (BLS)	784	Ceu's Certificate	25
Basic Cardiac Life Support Certification	463	Radiologic Technologist	23
Registered Radiologic Technologist	414	Radiography Certification	17
Certified Radiology Technician	349	Certified Nuclear Medicine Technologist	15
First Aid Cpr Aed	309	Security Clearance	14
Advanced Cardiac Life Support (ACLS) Certification	167	Certified Technologist	13
Driver's License	130	Registered Cardiovascular Invasive Specialist	12
American Heart Association Certification	123	Quality Improvement	10
Ca License	74	Registered Diagnostic Medical Sonographer	8
American Registry For Diagnostic Medical Sonography (ARDMS)	65	Nurse Practitioner	6
Diagnostic Radiologic Technologists	62	Radiologic Technician	5

Source: Burning Glass

**Table 11. Education Requirements for Computed Tomography Occupations in Bay Region**

Note: 65% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	778	86%
Associate Degree	85	9%
Bachelor's Degree or Higher	39	5%

Source: Burning Glass

## Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCC Data Mart.

## Sources

O\*Net Online  
 Labor Insight/Jobs (Burning Glass)  
 Economic Modeling Specialists International (EMSI)  
 CTE LaunchBoard [www.calpassplus.org/Launchboard/](http://www.calpassplus.org/Launchboard/)  
 Statewide CTE Outcomes Survey  
 Employment Development Department Unemployment Insurance Dataset  
 Living Insight Center for Community Economic Development  
 Chancellor's Office MIS system

## Contacts

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