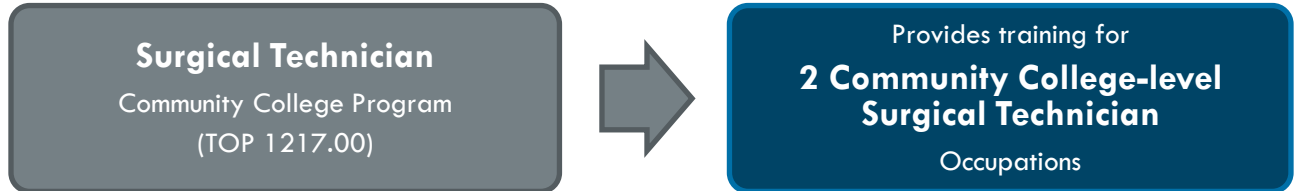


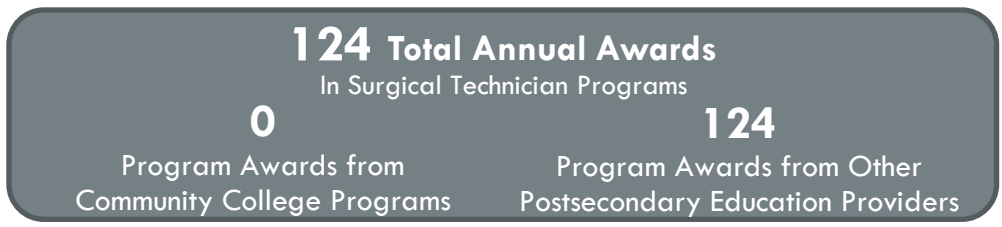
Surgical Technician

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

Summary



Over the next five years (2021-2026), employment for community college-level surgical technician occupations is projected to



The Inland Empire/Desert Centers of Excellence

 **Recommends**

Surgical Technician Program Development
to meet the need for more workers in the region

Introduction

California Community College surgical technician (TOP 1217.00) programs prepare students for employment through instruction of the procedures, skills, and use of equipment to assist in surgery (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by surgical technician programs lead to employment in the following occupations, further referred to as the surgical technician occupational group.

- Surgical Assistants (SOC 29-9093)
- Surgical Technologists (29-2055)

Job Counts and Projections

In 2021, there were 1,033 surgical technician jobs in the region. Regional employment for the surgical technician occupational group is projected to grow by 12% through 2026; 97 job openings are expected annually. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers aged 55 years and older in the region.

Exhibit 1. Five-year projections for the surgical technician occupational group, Inland Empire/Desert Region, 2021-2026

Occupation	2021 Jobs	2026 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Surgical Technologists	906	1,016	12%	428	86	13%
Surgical Assistants	127	141	11%	56	11	15%
Total	1,033	1,157	12%	483	97	14%

Source: Lightcast 2023.1

An online job ad search for jobs in the surgical technician occupational group was conducted to reveal the employers seeking these workers, including the median job advertisement duration, earnings information, and in-demand skills. Over the last 12 months, from February 2022 through January 2023, 147 job ads were posted for the surgical technician occupational group in the region. All of the job advertisements were for surgical technologists.

Exhibit 2 shows the number of job ads posted over the last 12 months in the region and the median posting duration. On average, employers kept online job ads for the surgical technician occupational group open for 24 days. The average regional online job is open for 28 days, indicating that it may be easier for employers to fill surgical technician positions than other jobs.

Exhibit 2. Job ads and posting duration, Inland Empire/Desert Region, February 2022 through January 2023

Occupation	Job Ads	Median Posting Duration (Days)
Surgical Technologists	147	24
Surgical Assistants	0	N/A
Total	147	24

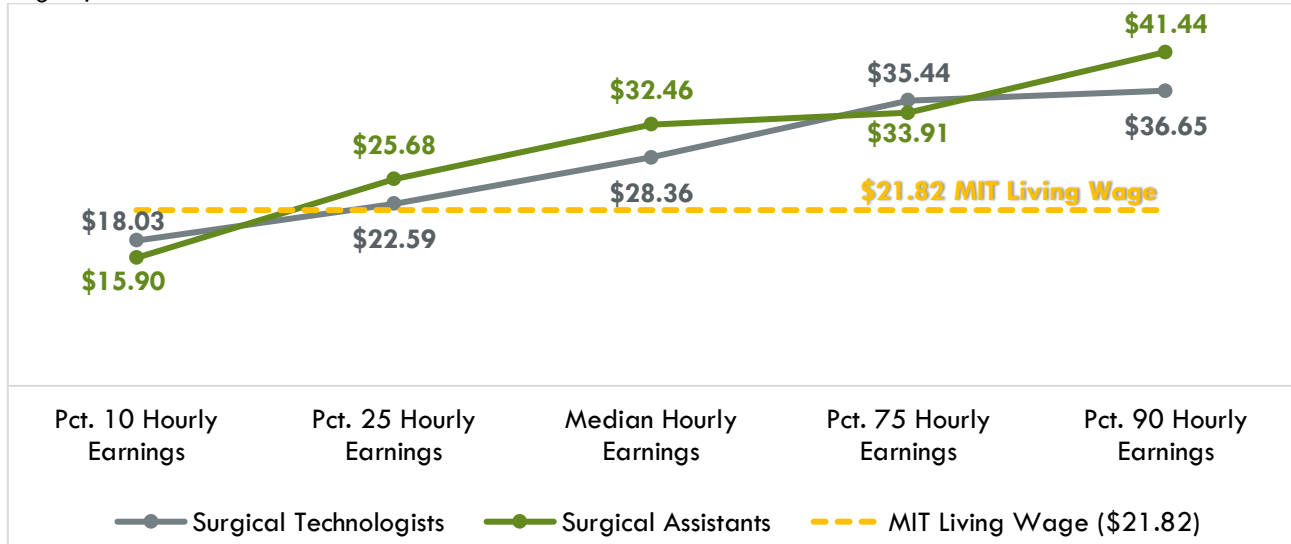
Source: Lightcast 2023.1

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a living wage. The MIT living wage calculator estimates that an individual must earn \$21.82 per hour or \$45,386 annually to be self-sufficient in California (Glasmeyer, 2022).

Exhibit 3 displays the hourly earnings for the surgical technician occupational group. The 25th percentile hourly earnings for the surgical technician occupational group are above the living wage standard, indicating that at least 75% of workers earn a living wage. There were too few employer job advertisements to extract reliable advertised wage information.

Exhibit 3. Hourly earnings by percentile for the surgical technician occupational group, Inland Empire/Desert Region, 2021



Source: Lightcast 2023.1

Job Titles, Employers, Skills, Education, and Work Experience

Exhibit 4 displays the job titles most frequently used in job ads for the surgical technician occupational group over the last 12 months. Displaying advertised job titles may provide insight into the types of positions sought by employers posting ads. The most frequently requested job title in the region, other than surgical technician, was operating room technician.

Exhibit 4. Job titles most frequently used in surgical technician job ads, Inland Empire/Desert Region, February 2022 through January 2023

Job Titles	Unique Job Ads
Surgical Technicians	47
Operating Room Technicians	46
Surgical Technologists	19
Surgical Scrub Technicians	9
Certified Surgical Technicians	7
All other job titles	19
Total	147

Source: Lightcast 2023.1

Exhibit 5 displays the employers posting the most job ads for the surgical technician occupational group during the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. Eisenhower Medical Center posted most job ads for the surgical technician occupational group over the last 12 months in the region.

Exhibit 5. Employers posting the most job ads for the surgical technician occupational group, Inland Empire/Desert Region, February 2022 through January 2023

Top Employer	Unique Job Ads
Eisenhower Medical Center	34
Desert Valley Hospital	18
Montclair Hospital Medical Center	14
Chino Valley Medical Center	11
JFK Memorial Hospital	9
Loma Linda University	8

Source: Lightcast 2023.1

Exhibit 6 lists a sample of specialized and employability skills employers seek when seeking workers to fill surgical technician positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Common skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job ads may be utilized to guide curriculum development.

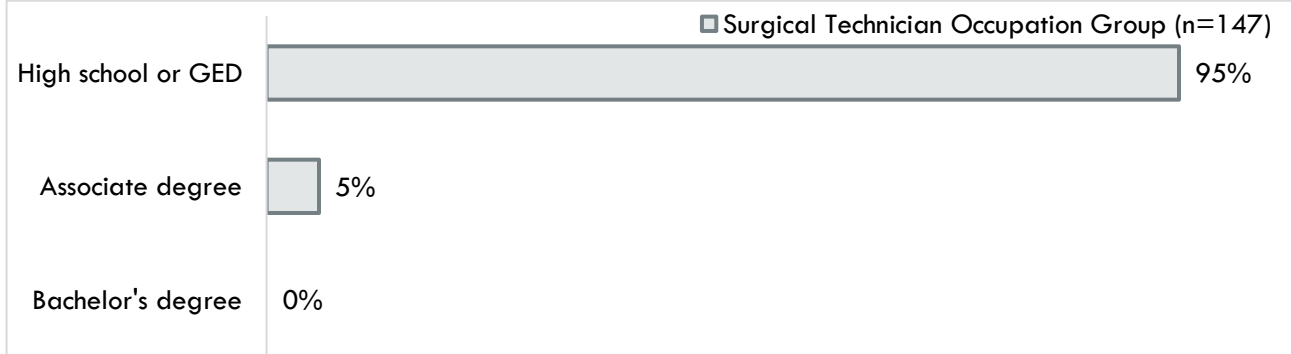
Exhibit 6. Sample of in-demand skills from employer job ads, Inland Empire/Desert Region, February 2022 through January 2023

Specialized skills (n=147)	Common skills
<ul style="list-style-type: none"> • Sterilization • Surgical Technology • Perioperative Care • Surgical Procedures • Traffic Patterns • Infection Control 	<ul style="list-style-type: none"> • Communication skills • Critical Thinking • Management • Detail-Oriented • Arithmetic • Computer Literacy

Source: Lightcast 2023.1

Exhibit 7 displays the minimum advertised education requirements for the surgical technician occupational group. According to the Bureau of Labor Statistics, between 20% and 73% of incumbent workers in this field hold a community college level of educational attainment, "some college, no degree," and an "associate degree." Most employers listing a minimum education level requested a high school diploma or GED.

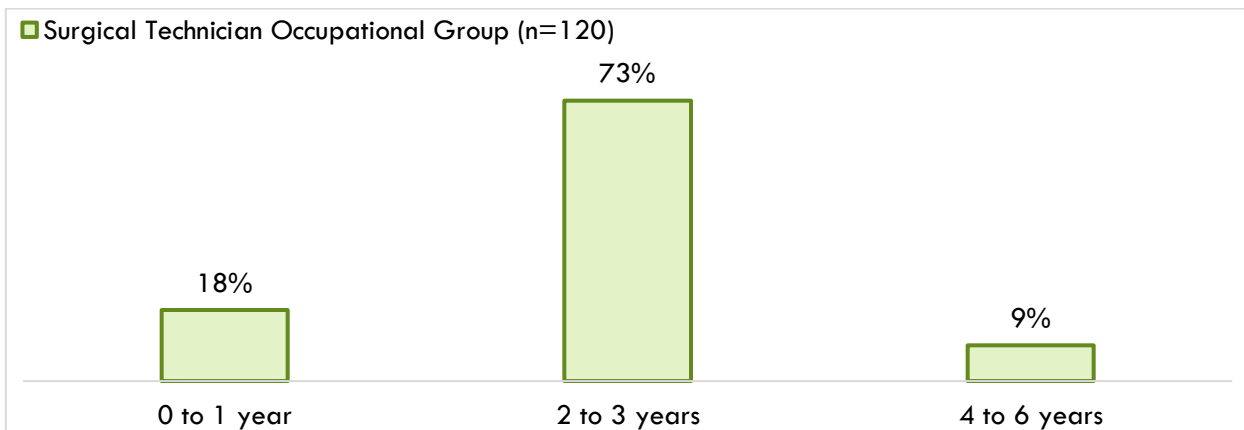
Exhibit 7. Minimum advertised education requirements, Inland Empire/Desert Region, February 2022 through January 2023



Source: Lightcast 2023.1

Exhibit 8 displays the real-time work experience requirements from employer job ads for the surgical technician occupational group. Approximately 18% of employers did not list a work experience requirement. Of the job ads with experience requirements listed, about 73% sought candidates with 2 to 3 years of previous work experience.

Exhibit 8. Real-time work experience requirements, Inland Empire/Desert Region, February 2022 through January 2023



Source: Lightcast 2023.1

Student Completions and Programs Outcomes

Regional community colleges do not currently offer surgical technician (TOP 1217.00) programs. Only three community colleges in California currently provide surgical technician training. Mt. San Antonio College’s surgical technician description may be helpful for local program development.

This certificate prepares students for entry-level positions within the surgical technology field. Students will learn about the scope of practice, tasks, and responsibilities of the surgical technician, universal safety precautions and personal protective equipment, and the classifications, uses, storing, preparation, handling, and distributing of surgical instruments and supplies. Topics also include learning about the operating room

environment, asepsis and sterile technique, biomedical and chemical hazards, and surgical technology career research and development (Mt. San Antonio College, 2023).

Exhibit 9 displays awards for other postsecondary education providers reported in surgical technology/technologist (CIP 51.0909) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years. Five other regional postsecondary education providers issued 124 awards annually over the last three academic years.

Exhibit 9. Other educational providers surgical technology/technologist training programs, three-year annual average credentials, Inland Empire/Desert Region, Academic Years 2017-2020

51.0909 – Surgical Technology/Technologist	Academic Year 2017-18	Academic Year 2018-19	Academic Year 2019-20	Other Educational Providers Annual Average Credentials, 2017-2020
American Career College-Ontario				58
Associate Degree	47	67	59	58
American College of Healthcare and Technology (Riverside)				32
Award 2 < 4 academic years	37	37	21	32
Concorde Career College-San Bernardino				12
Associate Degree	0	0	9	3
Postsecondary awards	13	14	0	9
North-West College-Riverside				14
Award 2 < 4 academic years	12	18	12	14
San Joaquin Valley College-Temecula				9
Associate Degree	0	0	26	9
Total	109	136	127	124

Source: IPEDS

Summary of Findings

The knowledge, skills, and abilities trained by surgical technician (TOP 1217.00) programs prepare students for employment in two community college-level occupations. Regional employment for these occupations is projected to grow by 12% through 2026; 97 job openings are expected annually. The 25th percentile hourly earnings for these occupations are between \$22.59 and \$25.68 per hour, above the living wage standard, indicating that at least 75% of workers in the field earn a living wage.

Regional community colleges do not currently offer surgical technician programs. Other postsecondary education institutions have issued 124 awards annually in surgical technology/technologist (CIP 51.0909) programs over the last three academic years.

The Centers of Excellence recommends developing programs related to surgical technicians to meet the regional demand for more workers. Colleges considering this program should partner with relevant employers and confirm their demand for surgical technician workers and the skills students need to secure work in this field shortly after exiting the program.

Contact

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Appendix: Occupation definitions, sample job titles, five-year projections, and earnings for surgical technician occupations

Occupation Definitions (SOC code), Education and Training Requirements, Community College Education Attainment

Surgical Technologists (29-2055)

Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up the operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeons' assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments.

Sample job titles: Certified Surgical Technician, Certified Surgical Technologist (CST), Operating Room Surgical Technician (OR St), Operating Room Technician (OR Tech), Operating Room Technologist (OR Tech), Surgical Scrub Technician, Surgical Scrub Technologist (Surgical Scrub Tech), Surgical Technician, Surgical Technologist (Surgical Tech)

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: None

Work Experience: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 73%

Surgical Assistants (29-9093)

Assist in operations, under the supervision of surgeons. May, in accordance with state laws, help surgeons to make incisions and close surgical sites, manipulate or remove tissues, implant surgical devices or drains, suction the surgical site, place catheters, clamp or cauterize vessels or tissue, and apply dressings to surgical site.

Sample job titles: Certified First Assistant (CFA), Certified Registered Nurse First Assistant (CRNFA), Certified Surgical Assistant (CSA), Certified Surgical First Assistant (CSFA), Certified Surgical Technician, Gastrointestinal Technician (GI Technician), Registered Nurse First Assistant (RNFA), Surgical First Assistant, Surgical Scrub Technician (Surgical Scrub Tech), Surgical Technician (Surgical Tech)

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: None

Work Experience: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 20%

Appendix: Methodology

Job ad data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job ads often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or collect resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2021 to 2026 job growth, wages, entry-level education, training, and work experience required for the surgical technician occupational group in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined)

Occupation	2021 Jobs	5-Year Change	5-Year % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Surgical Technologists (29-2055)	906	111	12%	86	\$18.03 to \$36.65	\$28.36	\$58,300	Postsecondary nondegree award & None	None
Surgical Assistants (29-9093)	127	14	11%	11	\$15.90 to \$41.44	\$32.46	\$62,700	Postsecondary nondegree award & None	None
Total	1,033	125	12%	97	-	-	-	-	-

Source: Lightcast 2023.1